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MONTHLY PROGRESS REPORT NO. 21

for the period November 1-30, 1977

to

ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

1860 Lincoln St., Suite 900

Denver, CO 80203

Contract No. 68-01-1946

Utah U-a/U-b Tract

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to
ENVIRONMENTAL PROTECTION AGENCY
REGION VIII

1860 Lincoln St., Suite 900
Denver, CO 80203

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by

Aeromet, Inc.
P.O. Box 45447
Tulsa, OK 74145

Utah U-a/U-b Tract

1.0 INTRODUCTION

Low level temperature and wind data were collected for November, 1977 at Bonanza, Utah. The data were collected using a 30 gm helium filled pilot balloon with a temperature sonde attached, a single theodolite and a TSR-2 receiver/recorder twice a day every other day. The observations were scheduled for ½ hour after sunrise and 1400L.

The pilot balloon had an ascent rate of 500 ft/min and was tracked by a single theodolite for 12 minutes with the azimuth and elevation angles recorded every 30 seconds on a cassette tape recorder. The tape was transcribed to a pilot balloon form after the observation.

The temperature sonde operated at 403 MHz and the signal was received by a ground plane antenna at least 16 ft AGL which was attached to the Aeromet, Inc. TSR-2 receiver/recorder. The TSR-2 receiver has a built-in Rustrak strip chart recorder and the temperature was recorded within the range from -50°C to +50°C. A baseline temperature calibration was performed with each T-Sonde by the adjustment of the recorded temperature to match the thermometer measured temperature next to the transmitting sonde. Once the calibration check was finished the balloon was released with the sonde attached and the temperature was recorded for at least 20 minutes. At the completion of each observation the data were mailed to Aeromet, Inc.

The collected temperature and wind data are accurate and have not been edited unless otherwise stated in the Pilot Balloon Summary Section. However, the obvious errors sometimes found in the recorded azimuth and elevation angles are corrected without mention. For example, the sequence of azimuth angles . . . 76.6, 75.3, 47.8, 73.8 . . . can be corrected without ambiguity. The more ambiguous errors are brought to the attention of the reader if editing has been performed, otherwise, the data are left as recorded and the filtering is left to the individual user. An example is the wind profile for Hanksville on 06/29/76 at 1300 MST found in the Monthly Progress Report No. 4. The azimuth angles starting 30 seconds after the launch and incremented by the same are as follows . . . 109.0, 110.0, 110.0, 281.0, 280.0, 282.0 . . . , while the corresponding elevation angles are as follows . . . 60.0, 57.6, 58.7, 58.6, 52.7, 44.3 . . . . The wind speed and direction change dramatically over the interval as can be seen in the report since these data were not edited.

2.0 DATA SUMMARY

2.1 Utah U-a/U-b Bonanza Field Summary

Eighty percent of the scheduled launches were attempted by the observer which resulted in 74% recovery of the temperature and wind data. A 7% loss of temperature data was the result of two defective temperature sondes while an additional 7% loss of temperature and wind data was caused by poor weather conditions. The remaining data losses were left unexplained by the observer. Other than the two defective temperature sondes, no problems with the Aeromet equipment were encountered during the month of November.

2.2 Mixing Layer Height

The average mixing layer height was computed for the morning and afternoon based on the morning and 1400L temperature soundings. The balloon release ½ hour after sunrise is near enough to the minimum temperature to assume the correctness of the calculated mixing layer heights. The afternoon balloon release is generally not at the time of maximum heating and the user of the mixing layer height data must be aware that minor changes in the calculated values can be expected. Without equipping the field sites with minimum/maximum thermometers the extrapolation of the afternoon data can not be justified in establishing a data base for statistical analysis. The approximation of the afternoon maximum temperature would be a "calculated guess" for there are: 1) local effects which are to be determined and would be filtered out with extrapolation, 2) mountain effects which alter the lower 1500m (e.g. downslope effects), and 3) meteorological effects which can alter the expected change in the sounding (e.g. advection, moisture, etc.).

It is felt that to better define the mixing layer height that a variety of "heat island" effects should be viewed. The rigorous method would be to define 15 "heat island" effects ranging from 0 to 14°C and let the user decide which would best serve his needs. However, for these analyses 0°, +5° and +10° "heat island" effects are calculated and listed for the morning and afternoon soundings in the table Average Mixing Layer Height.

The symbol N/D means that no mixing layer height was defined and sfc is the abbreviation for surface.

2.3 Stability and Inversion Classification

The temperature and wind data were edited to remove data felt to cause anomalous results in the stability and inversion classification schemes. Only the stations listed prior to the table classifying the inversions were used in the calculations.

3.0 DATA PROCESSING

3.1 Printed and Plotted Output

Wind speeds and directions are computed from the azimuth and elevation angles measured while tracking the balloon with the theodolite. The wind speed and direction are plotted versus height and printed out at 30 second intervals. The printed output includes the AGL and MSL height of the calculated wind value and the orthogonal components of the wind. The wind data are also written to magnetic tape.

The temperature data are processed and plotted with the temperature and the lapse rate per 300 meters versus height at 15 second intervals. Tic marks are placed on the temperature plot at significant levels. A solid line to the right side of the plot indicates the data for that layer are interpolated temperature values. The temperature data are also printed out and recorded on magnetic tape. The asterisk beside a height value indicates a significant level while a "?" indicates interpolated data.

The temperature data are also processed to produce a monthly summary of inversion layers and lapse rates within the inversions and from the inversion base to the surface by means of the Holzworth classification scheme for inversions (Holzworth, G. C., 1974: "Climatological Data on Atmospheric Stability in the United States". Paper presented at the American Meteorological Society Symposium on Atmospheric Diffusion and Air Pollution, September 9-13, 1974. Santa Barbara, California.)

The temperature and wind data are processed together to produce a monthly average bivariate frequency distribution of wind direction versus wind speed represented in the 500m layer adjacent to the ground. The distribution is presented by the six Pasquill stability classes (A-F) and a summary independent of stability. If the ΔT/100m criterion is met but the wind speed criterion is not met, then the wind data are checked

STABILITY CLASS	ΔT (°C/100m)	WIND SPEED
A	<-1.9	$\leq$2
B	-1.9 - -1.7	$\leq$5
C	-1.7 - -1.5	$\leq$6
D	-1.5 - -0.5	ALL SPEEDS
E	-0.5 - 1.5	$\leq$5
F	>1.5	$\leq$3

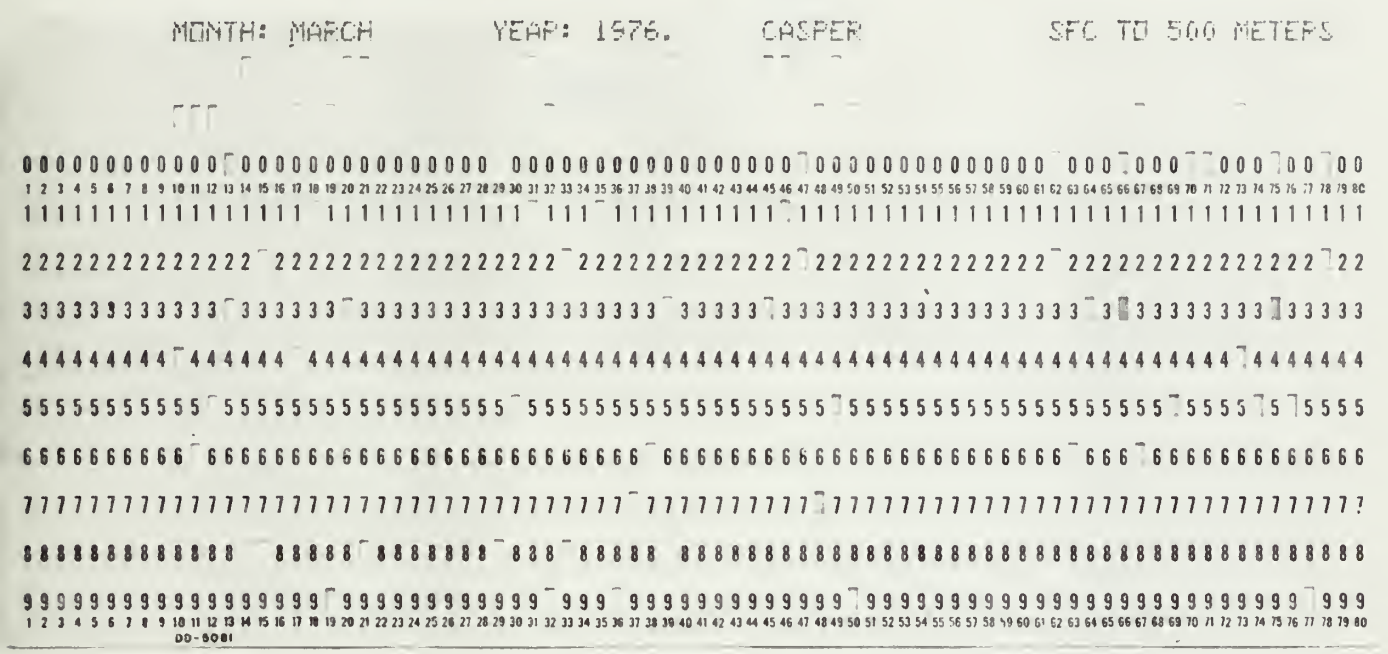
against the criterion for the next stability class, always cascading to the D stability class. Once the wind speed criterion is met the data are classified under the new stability class even though now the lapse rate exceeds the class criterion. For example, if the ΔT/100m value is

1.7 and the wind speed is 7 m/s, the lapse rate criterion is met for the stability class F, however the wind speed criterion is exceeded. The wind speed is greater than the 5 m/s maximum limit for class E but falls within the criterion of class D, which includes all wind speeds. As a result the observational data with a ΔT value of 1.7°C/100 m and a wind speed value of 7 m/s are classified under stability class D, not class F.

The data are also punched on computer cards in a format compatible with the STAR PROGRAM of the National Climatic Center, NOAA, U.S. Department of Commerce.

3.2 Punched Output

The punched output from the bivariate frequency distribution calculations include a header card as illustrated below, and the



punched distribution data for each wind direction under each stability class in agreement with the "star" output. The stability classes are number coded as follows:

STABILITY CLASS	NUMBER CODE
A	1
B	2
C	3
D	4
E	5
F	6
Independent of Stability	7

The station I.D. numbers are as follows:

STATION	I.D. NUMBER
Casper, Wyoming	1
Colorado C-b Tract	2
Craig, Colorado	3
Escalante, Utah	4
Hanksville, Utah	5
Rock Springs, Wyoming	6
Utah U-a/U-b Tract	7

The month and season number codes are as follows:

MONTH	1-12
SEASON	13 = DJF
	14 = MAM
	15 = JJA
	16 = SON
ANNUAL	17

PILOT BALLOON SUMMARY
Utah U-a/U-b Tract
November, 1977

November 1	0737	
	1409	
November 3	0730	Observer broke thermometer. Surface temperature accurate within +/- 1 to 4 degrees.
	1447	Temperature values were interpolated over the interval from 1/4 to 7 3/4 minutes.
November 5	0717	
	1359	Temperature values were interpolated over the intervals from 14 to 16 minutes and 18 1/4 to 20 3/4 minutes.
November 7	0709	Temperature values were interpolated over the interval from 3 1/2 to 10 3/4 minutes.
	1401	No wind data recorded.
November 9	0735	
	1403	
November 11	0727	
	1355	
November 13	0728	
	1401	Temperature sonde failed immediately after launch.
November 15	0740	
	1421	Temperature values were interpolated over the interval from 1/4 to 11 3/4 minutes.
November 17	0737	No wind data recorded.
	AFTN	Observer missed launch.

PILOT BALLOON SUMMARY
Utah U-a/U-b Tract
November, 1977

November 19	MORN	Observer stranded away from home by snow storm.
	AFTN	Observer stranded away from home by snow storm.
November 21	MORN	Observer missed launch.
	1410	Balloon entered clouds after 9 1/2 minutes.
November 23	0731	
	1407	
November 25	MORN	Observer missed launch.
	AFTN	Observer missed launch.
November 27	0806	
	1401	
November 29	0731	No temperature due to equipment problems.
	1348	

AVERAGE MIXING LAYER HEIGHT

Utah U-a/U-b Tract

November, 1977

HEIGHT IN METERS

	MORNING			AFTERNOON		
DATE	0°	+5°	+10°	0°	+5°	+10°
1	sfc	250m	1850m	1200m	2000m	2650m
3	sfc	200m	550m	100m	800m	2150m
5	sfc	1000m	N/D	sfc	2700m	N/D
7	250m	800m	1400m	250m	800m	1400m
9	100m	1450m	1750m	1150m	1750m	2400m
11	sfc	300m	650m	350m	600m	1800m
13	sfc	250m	600m			
15	sfc	100m	1300m	50m	3100m	N/D
17	100m					
19						
21				300m	450m	700m
23	sfc	750m	N/D	350m	2500m	N/D
25						
27	sfc	300m	1250m	50m	2900m	3700m
29				250m	1450m	1700m

CLOUD COVER AND SIGNIFICANT WEATHER

Utah U-a/U-b Tract

November, 1977

DATE	MORNING	AFTERNOON
1	scattered	clear
3	clear	clear
5	overcast	overcast
7	scattered	scattered
9	clear	clear
11	scattered	scattered
13	clear	scattered
15	scattered	scattered
17		
19		
21		overcast
23	scattered	clear
25		
27	overcast	overcast
29	overcast	overcast

UTAH UAUM ELEV 1670 METERS SOUNDING ID 5724

DATE 11/01/77 TIME 07:57:51 ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	152.	2.09	0.0

UTAH UAUM ELEV 1670 METERS SOUNDING ID 5725

DATE 11/01/77 TIME 14:09:31 ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
1103.	1555.	0.82	-1.12

UTAH UAUM ELEV 1670 METERS SOUNDING ID 5744

DATE 11/03/77 TIME 07:30:51 ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	762.	0.71	0.0

UTAH UAUM ELEV 1670 METERS SOUNDING ID 5745

DATE 11/03/77 TIME 10:47:51 ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
555.	571.	0.0	-0.57

UTAH UAUM ELEV 1670 METERS SOUNDING ID 5751

DATE 11/05/77 TIME 07:17:51 ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	152.	0.98	0.0

UTAH UAUM ELEV 1670 METERS SOUNDING ID 5752

DATE 11/05/77 TIME 13:59:51 ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	30.	0.48	0.0

UTAH UAUM ELEV 1670 METERS SOUNDING ID 5768

DATE 11/07/77 TIME 07:04:51 ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M

UTAH UAUB ELEV 1370 METERS SOUNDING ID 5744

DATE 11/07/77 TIME 07:09MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
152.	274.	0.55	-2.12

UTAH UAUB ELEV 1370 METERS SOUNDING ID 5749

DATE 11/07/77 TIME 14:01MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
152.	274.	0.55	-2.12

UTAH UAUB ELEV 1070 METERS SOUNDING ID 5752

DATE 11/09/77 TIME 07:55MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
38.	152.	1.90	-5.12

UTAH UAUB ELEV 1070 METERS SOUNDING ID 5750

DATE 11/09/77 TIME 10:03MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
1147.	1350.	0.00	-1.01

UTAH UAUB ELEV 1070 METERS SOUNDING ID 5747

DATE 11/11/77 TIME 07:27MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	115.	.52	0.

UTAH UAUB ELEV 1070 METERS SOUNDING ID 5729

DATE 11/11/77 TIME 15:55MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
321.	1[illegible].	0.01	-1.23

UTAH UAUB ELEV 1070 METERS SOUNDING ID 5759

DATE 11/13/77 TIME [illegible]MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
1.	808.	1.65	0.0

UTAH UAUB ELEV 1070 METERS SOUNDING ID 5755

UTAH UAUM ELEV 1670 METERS SOUNDING ID 5755

DATE 11/15/77 TIME 07:40MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	152.	2.99	0.0

UTAH UAUM ELEV 1670 METERS SOUNDING ID 5757

DATE 11/15/77 TIME 14:21MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-0.58
100.	250.	-0.98
250.	500.	-0.84
500.	750.	-0.74
750.	1000.	-0.75
1000.	1500.	-0.87

UTAH UAUM ELEV 1670 METERS SOUNDING ID 5758

DATE 11/17/77 TIME 07:37 MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE INSUFFICIENT DATA WITHIN 2000M OF THE SFC

UTAH UAUM ELEV 1670 METERS SOUNDING ID 5760

DATE 11/21/77 TIME 14:10MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
256.	857.	1.55	-1.05

UTAH UAUM ELEV 1670 METERS SOUNDING ID 5780

DATE 11/25/77 TIME 07:31MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	76.	2.48	0.0

UTAH UAUM ELEV 1670 METERS SOUNDING ID 5784

DATE 11/25/77 TIME 14:07MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-2.31
100.	250.	-0.48
250.	500.	-0.40
500.	750.	-0.81
750.	1000.	-1.05
1000.	1500.	-0.85

UTAH UAUM ELEV 1670 METERS SOUNDING ID 5756

DATE 11/27/77 TIME 08:[illegible]MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

UTAH UAUM ELEV 1070 METERS SOUNDING ID 5756

DATE 11/27/77 TIME 08:04:51 ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	555.	0.45	0.0

UTAH UAUM ELEV 1070 METERS SOUNDING ID 5754

DATE 11/27/77 TIME 14:01:51 ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-0.70
100.	250.	-0.85
250.	500.	-0.72
500.	750.	-0.92
750.	1000.	-0.82
1000.	1500.	-0.71

UTAH UAUM ELEV 1070 METERS SOUNDING ID 5757

DATE 11/29/77 TIME 15:48:51 ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
251.	595.	0.75	-0.91

MONTH: NOVEMBER YEAR: 1977 UTAH LAKE ELEV 1670 METERS

HOLZWORTH'S CLASSIFICATION SCHEME FOR INVERSIONS
MODIFIED TO SHOW TOTAL NUMBER INSTEAD OF PERCENT

THICKNESS (METERS)	SFC	INVERSION BASE HEIGHT (M) 1- 100	101- 250	251- 500	501- 750	751- 1000	1001- 1500	1501- 2000	2001- 2500	2501- 3000	TOTAL
1 - 100	2	0	0	0	1	0	0	0	0	0	3
101 - 250	3	1	2	1	0	0	2	0	0	0	9
251 - 500	0	0	0	1	0	0	0	0	0	0	1
501 - 750	2	1	0	1	0	0	0	0	0	0	3
751 - 1000	1	0	0	0	0	0	0	0	0	0	1
1001 - 1500	1	0	0	0	0	0	0	0	0	0	1
> 1500	0	0	0	0	0	0	0	0	0	0	0
INV TOTAL	9	1	2	3	1	0	2	0	0	0	18
ST/DZ 5		0	0	0	1	0	0	0	0	0	1
FROM INV 4		0	0	0	0	0	0	0	0	0	0
BASE 3		0	0	1	0	0	2	0	0	0	3
1 TO 2		0	0	1	0	0	0	0	0	0	1
SFC 1		1	2	1	0	0	0	0	0	0	4
TOT INV		3	3	3	3	3	3	DT/DZ (DEG C)/100M			
DT/DZ FOR 5		0	0	1	0	0	0	5= 0.00 TO -0.40			
SAFE 4		2	1	1	1	1	1	4=-0.41 TO -0.80			
LAYERS 3		0	2	1	2	2	2	3=-0.81 TO -1.20			
AS INV 2		0	0	0	0	0	0	2=-1.21 TO -1.60			
BASE 1		1	0	0	0	0	0	1=<-1.60			

MIXING HEIGHTS — YEARS 1977 — GUAM NAVY — SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 1-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE A STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 2 SOUNDINGS FROM A SAMPLE OF 22 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: NOVEMBER YEAR: 1977 UTAH LAKE SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 1-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE D STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 2 SOUNDINGS FROM A SAMPLE OF 22 SOUNDINGS DID NOT HAVE SFC TO 500 FT TEMP AND/OR WIND DATA

MONTH: NOVEMBER YEAR: 1977 UTAH LAKE SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 1-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE C STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 0 SOUNDINGS FROM A SAMPLE OF 22 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: NOVEMBER YEAR: 1977 UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 1-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.09	0.0	0.0	0.0	0.0	0.0	1.0	0.09
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.09	0.09	0.09	0.0	0.0	0.0	4.7	0.27
S	0.0	0.0	0.09	0.0	0.0	0.0	5.9	0.18
SSW	0.09	0.0	0.0	0.0	0.0	0.0	2.2	0.09
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.09	0.0	0.0	0.0	0.0	0.0	2.0	0.09
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.09	0.0	0.0	0.0	0.0	5.5	0.09
NW	0.09	0.0	0.0	0.0	0.0	0.0	1.1	0.09
NNW	0.09	0.0	0.0	0.0	0.0	0.0	1.0	0.09
AVG SPEED	1.7	4.3	8.1	0.0	0.0	0.0		0.0
TOTAL	0.55	0.27	0.18	0.0	0.0	0.0		1.00

RELATIVE FREQUENCY OF OCCURRENCE OF THE D STABILITY CLASS IS 0.55

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 2 SOUNDINGS FROM A SAMPLE OF 22 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: SEPTEMBER YEAR: 1977 UTAH LAKE SPEED 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.11	0.0	0.0	0.0	0.0	0.0	0.7	0.11
E	0.11	0.0	0.0	0.0	0.0	0.0	0.6	0.11
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.11	0.0	0.0	0.0	0.0	4.1	0.11
SSW	0.0	0.11	0.0	0.0	0.0	0.0	4.9	0.11
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.11	0.0	0.0	0.0	0.0	0.0	2.7	0.11
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.33	0.0	0.0	0.0	0.0	0.0	1.5	0.33
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.11	0.0	0.0	0.0	0.0	0.0	0.9	0.11
AVG SPEED	1.5	4.5	0.0	0.0	0.0	0.0		0.0
TOTAL	0.78	0.22	0.0	0.0	0.0	0.0		1.00

RELATIVE FREQUENCY OF OCCURRENCE OF THE E STABILITY CLASS IS 0.45

RELATIVE FREQUENCY OF CALM = 0.0

A TOTAL OF 2 SOUNDINGS FROM A SAMPLE OF 22 SOUNDINGS DID NOT HAVE SUFFICIENT OF TEMP AND WIND DATA

MONTH: NOVEMBER YEAR: 1977 UTAH HAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE F STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 2 SOUNDINGS FROM A SAMPLE OF 22 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: NOVEMBER YEAR: 1977 UTAH HAUB SEC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.05	0.0	0.0	0.0	0.0	0.0	0.7	0.05
E	0.05	0.0	0.0	0.0	0.0	0.0	0.6	0.05
ESE	0.05	0.0	0.0	0.0	0.0	0.0	1.0	0.05
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.05	0.05	0.05	0.0	0.0	0.0	4.7	0.15
S	0.0	0.10	0.05	0.0	0.0	0.0	5.3	0.15
SSW	0.05	0.05	0.0	0.0	0.0	0.0	3.0	0.10
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.10	0.0	0.0	0.0	0.0	0.0	2.4	0.10
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.15	0.05	0.0	0.0	0.0	0.0	2.5	0.20
NW	0.05	0.0	0.0	0.0	0.0	0.0	1.1	0.05
NNW	0.10	0.0	0.0	0.0	0.0	0.0	1.5	0.10
AVG SPEED	1.5	4.8	8.1	0.0	0.0	0.0		0.0
TOTAL	0.65	0.25	0.10	0.0	0.0	0.0		1.00

NORMALIZED FREQUENCY DISTRIBUTION INDEPENDENT OF STABILITY

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 2 SOUNDINGS FROM A SAMPLE OF 22 SOUNDINGS DID NOT HAVE SUFFICIENT TEMP AND WIND DATA

UTAH UAUB — ELEV 1670 METERS — SOUNDING ID 5728

DATE 11/01/77 TIME 07:57 MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 500M	D/T LAPSE	WS M/S	WD DEG
	SFC		-5.80		0.9		1.5	315.
1.0	150	1820	-0.61	-5.19	-0.57	-5.50	5.7	155.
1.0	*152	1828	-0.01		-0.57	-5.50		
2.0	300	1976	-1.16	-0.57	-1.52	1.01	4.9	191.
2.1	324.	2000.	-1.76	-4.37	-3.01	-0.69	4.5	195.
3.2	500	2176	-3.21	-1.00	-2.29	0.64	2.6	245.
5.2	824.	2500.	-0.72	-2.93	-2.89	0.04	3.8	157.
8.3	1324.	3000.	-10.07	-5.93	-5.89	-0.96	1.2	260.
11.5	*1834	3510	-14.34		-0.98	1.95		
13.5	*2139	3815	-12.65		-1.37	1.56		
14.7	2324.	4000.	-13.91	-5.66	-0.59	2.34		
21.3	3324.	5000.	-16.34	-2.40	-1.97	0.95		

UTAH UAUB — ELEV 1670 METERS — SOUNDING ID 5728

DATE 11/01/77 TIME 07:57 MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1670.	1.1	-1.1	1.5	315.
0.5	76.	1752.	-2.2	4.0	4.5	151.
1.0	152.	1828.	-2.5	5.3	5.7	156.
1.5	229.	1905.	-0.8	4.9	4.9	170.
2.0	305.	1981.	1.0	4.5	4.5	192.
2.5	381.	2057.	1.0	4.0	4.2	194.
3.0	468.	2144.	1.4	2.9	3.2	198.
3.5	557.	2235.	1.2	1.5	1.9	217.
4.0	634.	2312.	1.1	0.7	1.3	255.
4.5	710.	2388.	0.0	1.5	1.5	180.
5.0	792.	2468.	-1.0	3.0	3.2	191.
5.5	885.	2561.	-2.1	4.5	4.9	155.
6.0	967.	2643.	-1.9	4.1	4.5	155.
6.5	1043.	2719.	-0.6	2.7	2.8	167.
7.0	1120.	2795.	1.5	1.4	2.0	227.
7.5	1196.	2872.	2.1	0.9	2.2	255.
8.0	1272.	2948.	1.8	0.5	1.9	201.
8.5	1352.	3028.	1.7	0.3	1.7	259.
9.0	1443.	3119.	2.0	0.7	2.7	255.
9.5	1538.	3206.	2.9	1.3	3.2	247.
10.0	1606.	3282.	3.7	2.0	4.2	241.
10.5	1682.	3358.	4.9	1.5	5.1	253.
11.0	1759.	3435.	5.2	1.2	5.3	257.
11.5	1835.	3511.	6.0	-1.3	6.7	281.
12.0	1911.	3587.	7.9	-5.2	9.5	303.

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5725

DATE 11/01/77 TIME 14:0[illegible]GMT ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 500M	D/T LAPSE	WS M/S	WD DEG
	SFC		6.05		-4.0		1.0	50.
0.8	150.	1826.	3.37	-2.68	-4.40	-1.57	2.2	192.
1.4	324.	2000.	1.66	-1.71	-5.07	-2.14	2.4	200.
1.3	300.	1976.	1.73	0.07	-5.07	-2.14	2.5	198.
2.0	500.	2176.	-0.47	-2.20	-5.68	-2.76	2.5	220.
3.2	824.	2500.	-3.99	-2.73	-8.25	-5.31	3.8	225.
4.3	*1162.	2838.	-6.92		-1.75	1.20		
5.3	1324.	3000.	-5.56	-2.16	-0.38	2.54	8.0	253.
5.5	*1353.	3029.	-5.56		-0.50	2.54		
8.5	*1814.	3490.	-9.28		0.97	5.03		
9.3	*1929.	3605.	-8.00		-1.94	0.99		
9.8	*2005.	3681.	-9.87		0.0	2.93		
10.5	*2119.	3795.	-7.76		2.71	5.64		
11.8	2324.	4000.	-8.39	-3.03	-0.77	2.15	M	M
16.1	3324.	5000.	-15.04	-6.65	-2.95	-0.02		
24.5	4324.	6000.	-21.99	-6.95	-3.99	-1.07		

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5725

DATE 11/01/77 TIME 14:[illegible]GMT ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1676.	-0.5	-0.9	1.0	50.
0.5	76.	1752.	0.3	1.5	1.5	193.
1.0	223.	1899.	0.5	2.2	2.2	191.
1.5	347.	2023.	0.9	2.1	2.3	202.
2.0	490.	2166.	1.7	1.7	2.4	225.
2.5	634.	2310.	2.6	0.9	2.9	251.
3.0	771.	2447.	2.5	2.8	3.6	219.
3.5	917.	2593.	3.6	2.4	4.3	236.
4.0	1114.	2790.	5.0	5.0	7.5	229.
4.5	1201.	2877.	6.1	2.7	6.6	246.
5.0	1277.	2953.	7.9	2.3	8.3	254.
5.5	1353.	3029.	7.4	2.4	7.8	252.
6.0	1429.	3105.	6.9	2.4	7.3	251.
6.5	1506.	3182.	6.4	2.9	7.0	246.
7.0	1586.	3262.	5.7	3.3	6.6	240.
7.5	1662.	3338.	5.6	2.6	6.6	244.
8.0	1739.	3415.	7.1	-1.5	7.3	282.
8.5	1815.	3491.	7.9	-3.2	8.5	292.
9.0	1891.	3567.	11.[illegible]	-5.7	12.4	297.
9.5	1967.	3643.	13.3	-6.8	15.9	304.
10.0	2043.	3719.	15.[illegible]	-9.4	17.7	302.
10.5	2120.	3796.	13.5	-9.7	16.6	306.

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5744

DATE 11/03/77 TIME 07:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	T/T SOUND	D/T LAPSE	WS M/S	WD DEG
	SFC		-2.17		0.0		1.0	315.
1.0	150.	1826.	0.21	2.38	2.24	5.17	0.5	113.
2.0	306.	1976.	1.44	1.23	1.49	4.42	1.0	45.
2.1	324.	2000.	1.64	0.10	0.56	3.49	1.2	47.
3.3	500.	2176.	2.09	0.55	1.86	4.74	1.2	135.
5.0	* 761.	+ 2437.	3.24		0.0	2.03		
5.4	824.	2500.	3.05	0.90	-0.74	2.14	0.4	191.
8.7	1324.	3000.	-0.16	-2.55	-2.51	0.12	5.9	218.
15.2	2324.	4000.	-5.44	-5.94	-0.76	2.17		
21.5	3324.	5000.	-14.16	-8.72	-4.19	2.73		
28.0	4324.	6000.	-21.05	-6.89	-1.98	0.95		

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5744

DATE 11/03/77 TIME 07:30MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WD SPEED M/S	AND DIR DEG
0.0	0.	1676.	0.7	-0.7	1.0	315.
0.5	76.	1752.	-1.0	0.9	1.4	132.
1.0	152.	1828.	-0.5	0.2	0.6	113.
1.5	229.	1905.	-0.2	-0.5	0.6	25.
2.0	305.	1981.	-0.7	-0.7	1.0	45.
2.5	381.	2057.	-1.4	-1.0	1.8	55.
3.0	457.	2133.	-0.1	0.2	0.2	162.
3.5	533.	2209.	0.5	2.1	2.0	193.
4.0	610.	2286.	-1.1	3.4	3.5	162.
4.5	686.	2362.	0.1	4.0	4.0	182.
5.0	762.	2438.	1.3	6.5	6.6	192.
5.5	838.	2514.	1.2	6.2	6.3	191.
6.0	914.	2590.	2.2	5.5	5.9	202.
6.5	991.	2667.	1.7	6.2	6.2	196.
7.0	1067.	2743.	1.6	5.5	5.7	196.
7.5	1143.	2819.	2.3	5.4	6.0	203.
8.0	1219.	2895.	3.5	5.1	6.2	215.
8.5	1295.	2971.	3.5	4.7	5.9	216.
9.0	1372.	3048.	3.6	4.5	5.9	220.
9.5	1448.	3124.	4.0	4.2	6.3	227.
10.0	1524.	3200.	5.1	4.3	6.6	230.
10.5	1600.	3276.	5.4	4.3	6.9	231.
11.0	1682.	3358.	5.8	4.0	7.1	236.
11.5	1758.	3434.	5.8	5.1	7.6	242.
12.0	1834.	3510.	6.8	2.6	7.2	249.

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5743

DATE 11/03/77 TIME 14:47 MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T SOUN	D/T LAPSE	WS M/S	WD DEG
	SFC		10.04		-0.0		1.5	135
1.0	? 150	1826	15.56	-1.08	-0.71	2.22	1.7	301
2.0	? 300	1976	15.20	-0.36	-0.71	2.22	1.3	306
2.1	324.	?2000.	15.11	-0.09	-0.71	2.21	1.2	241
3.3	? 500	2176	14.00	-0.45	-0.54	2.59	0.5	219
5.4	824.	?2500.	13.55	-1.08	-0.72	2.21	11.3	164
8.6	1324.	3000.	9.32	-5.35	-4.92	-1.99	12.7	174
14.3	2324.	4000.	4.45	-5.85	-2.05	0.88		
20.8	3324.	5000.	-1.86	-0.31	-1.71	1.22		

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5743

DATE 11/03/77 TIME 14:47MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1676.	-1.1	1.1	1.5	135.
0.5	76.	1752.	1.7	-2.2	2.8	323.
1.0	152.	1828.	1.5	-0.9	1.7	301.
1.5	229.	1905.	1.2	-0.2	1.2	280.
2.0	305.	1981.	1.0	-0.8	1.3	308.
2.5	381.	2057.	-0.8	-0.4	1.1	44.
3.0	457.	2133.	4.4	-1.9	4.8	293.
3.5	533.	2209.	-2.0	7.5	7.8	101.
4.0	610.	2286.	-2.2	7.5	7.8	105.
4.5	686.	2362.	-3.0	8.8	9.1	101.
5.0	762.	2438.	-3.2	10.5	10.9	103.
5.5	838.	2514.	-3.1	11.0	11.4	104.
6.0	914.	2590.	-2.3	11.3	11.5	169.
6.5	991.	2667.	-2.4	12.2	12.5	169.
7.0	1067.	2743.	-2.1	12.1	12.3	170.
7.5	1143.	2819.	-2.0	11.9	11.9	170.
8.0	1219.	2895.	-4.3	10.7	11.6	158.
8.5	1315.	2991.	-1.4	12.4	12.5	174.
9.0	1463.	3139.	-1.5	15.3	15.4	175.
9.5	1571.	3247.	-0.3	18.1	18.5	193.
10.0	1653.	3329.	2.8	15.6	15.9	190.
10.5	1746.	3422.	0.5	15.7	15.7	197.
11.0	1827.	3503.	0.9	13.2	14.1	201.
11.5	1905.	3579.	5.8	11.9	15.2	206.

UTAH UAUB — ELEV 1676 METERS — SOUNDING ID 5751

DATE 11/05/77 TIME 07:17MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T SOUN	D/T LAPSE	WS M/S	WD DEG
	SFC		0.52		0.4		1.0	360.
1.0	150.	1826.	8.02	1.50	8.0	2.93	5.8	173.
1.0	* 152.	1828.	8.02		8.0	2.93		
2.0	300.	1976.	7.28	-0.74	-3.14	-0.21	8.1	166.
2.1	324.	2000.	6.95	-0.71	-2.96	-0.03	8.8	167.
3.3	500.	2176.	5.13	-1.44	-2.04	0.80	12.1	174.
5.4	824.	2500.	3.03	-2.10	-2.24	0.68	13.5	185.
8.7	1324.	3000.	-0.01	-3.35	-2.27	0.44	14.5	194.
14.9	2324.	4000.	-9.57	-9.20	-2.91	0.02		

UTAH UAUB — ELEV 1676 METERS — SOUNDING ID 5751

DATE 11/05/77 TIME 07:17MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1676.	0.0	-1.0	1.0	360.
0.5	76.	1752.	-0.5	5.8	5.8	175.
1.0	152.	1828.	-0.8	5.8	5.8	172.
1.5	229.	1905.	-1.9	8.8	8.9	172.
2.0	305.	1981.	-2.0	8.0	8.2	166.
2.5	384.	2060.	-1.5	10.6	10.7	172.
3.0	461.	2137.	-0.4	11.0	11.0	178.
3.5	537.	2213.	-0.4	12.8	12.8	178.
4.0	613.	2289.	0.3	13.5	13.5	181.
4.5	689.	2365.	0.1	13.7	13.7	180.
5.0	765.	2441.	0.3	13.8	13.8	181.
5.5	842.	2518.	1.4	13.4	13.4	186.
6.0	918.	2594.	1.9	15.1	15.2	187.
6.5	994.	2670.	2.8	14.0	14.2	191.
7.0	1070.	2746.	2.5	14.6	14.9	191.
7.5	1146.	2822.	3.5	13.8	14.3	194.
8.0	1223.	2899.	3.4	12.7	13.2	195.
8.5	1299.	2975.	3.2	14.6	14.9	192.
9.0	1375.	3051.	3.5	13.2	13.7	196.
9.5	1451.	3127.	5.9	9.0	10.8	202.
10.0	1527.	3203.	4.1	9.3	10.2	204.
10.5	1604.	3280.	4.0	9.1	10.2	205.
11.0	1680.	3356.	4.9	10.9	12.0	204.
11.5	1759.	3435.	5.7	11.2	12.6	207.
12.0	1835.	3511.	7.4	10.4	12.8	216.

UTAH UAUM — ELEV 1670 METERS — SOUNDING ID 5752

DATE 11/05/77 TIME 13:59MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		16.61		0.0		5.1	315.
1.0	156.	1826.	12.28	-0.73	-2.16	0.76	9.4	170.
2.0	300.	1970.	11.45	-0.83	-1.81	1.12	7.9	170.
2.1	320.	2000.	10.99	-0.22	-2.56	0.57	8.2	170.
3.3	500.	2176.	9.44	-1.75	-3.65	-0.75	5.8	187.
5.1	824.	2500.	5.87	-3.10	-3.15	-0.22	10.5	178.
6.3	1324.	3000.	1.98	-4.36	-1.88	1.05	12.0	189.
13.9	2324.	4000.	-7.12	-9.10	-1.93	1.00		
16.5	*2714	4390	-9.79		0.0	2.93		
17.8	*2904	4580	-7.86		-0.19	2.73		
20.5	3324.	5000.	-11.35	-4.24	-3.52	-0.59		

UTAH UAUM — ELEV 1670 METERS — SOUNDING ID 5752

DATE 11/05/77 TIME 13:59MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1670.	3.6	-3.6	5.1	315.
0.5	76.	1752.	-1.9	7.6	7.8	166.
1.0	152.	1828.	-1.7	9.3	9.5	170.
1.5	229.	1905.	-1.0	8.8	8.8	175.
2.0	305.	1981.	-0.6	7.8	7.8	176.
2.5	381.	2057.	0.4	9.4	9.4	182.
3.0	457.	2133.	2.1	6.6	6.9	196.
3.5	536.	2212.	-0.2	8.8	8.8	178.
4.0	629.	2305.	0.2	9.8	9.8	181.
4.5	722.	2398.	-0.3	10.4	10.4	178.
5.0	804.	2480.	-0.4	11.0	11.0	178.
5.5	888.	2564.	-0.2	10.2	10.2	179.
6.0	971.	2647.	0.5	10.9	10.9	185.
6.5	1051.	2727.	1.7	11.1	11.2	189.
7.0	1127.	2803.	2.0	11.8	12.0	190.
7.5	1204.	2880.	1.5	14.3	14.4	187.
8.0	1280.	2956.	1.8	12.2	12.3	189.
8.5	1356.	3032.	1.8	11.5	11.7	189.
9.0	1432.	3108.	1.9	10.6	10.8	190.
9.5	1523.	3199.	1.9	12.6	12.7	189.
10.0	1609.	3285.	2.5	13.5	13.8	192.
10.5	1685.	3361.	3.0	12.9	13.0	194.
11.0	1762.	3438.	3.2	11.3	11.7	196.
11.5	1849.	3525.	3.0	11.1	11.5	195.
12.0	1967.	3643.	3.2	11.5	12.0	195.

UTAH UAUM ELEV 1370 METERS SOUNDING ID 5748

DATE 11/07/77 TIME 07:09MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		4.45		6.0		0.5	350.
0.7	124.	1500.	1.41	-3.13	0.19	3.12	0.2	181.
0.8	150	1520	1.56	0.04	0.19	3.12	0.3	180.
1.7	300	1676	1.79	0.43	-1.13	1.86	0.7	182.
3.0	560	1876	1.12	-0.67	0.0	2.93	3.3	90.
3.8	624.	?2000.	1.41	-0.29	0.19	3.12	1.5	60.
7.1	1124.	2500.	0.93	-0.48	-0.19	2.74	M	M
10.4	1624.	3000.	-0.03	-0.96	-0.95	1.98	M	M
16.0	2624.	4000.	-8.48	-8.45	-5.27	-0.37		
16.5	*2720	4096.	-9.48		-0.78	2.15		
17.8	*2910	4286	-9.44		2.51	5.44		
22.4	3624.	5000.	-9.87	-0.99	-0.58	2.34		

UTAH UAUB ELEV 1370 METERS SOUNDING ID 5748

DATE 11/07/77 TIME 07:09MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1370.	0.0	-0.5	0.5	350.
0.5	76.	1452.	0.0	0.1	0.1	181.
1.0	197.	1573.	-0.3	0.4	0.4	180.
1.5	274.	1650.	0.2	0.8	0.8	197.
2.0	350.	1726.	-0.5	0.5	0.9	155.
2.5	426.	1802.	-1.7	0.8	1.8	115.
3.0	502.	1878.	-3.3	0.5	3.4	98.
3.5	578.	1954.	-1.9	-0.2	1.9	83.
4.0	655.	2031.	-1.0	-0.7	1.2	54.
4.5	731.	2107.	-1.8	-3.4	3.8	28.
5.0	807.	2183.	-2.2	-5.1	5.7	27.
5.5	883.	2259.	-2.2	-5.3	5.7	22.
6.0	959.	2335.	-1.4	-5.1	5.5	15.
6.5	1036.	2412.	-0.9	-6.6	6.7	8.
7.0	1112.	2488.	-1.0	-7.5	7.7	14.

UTAH UAUM ELEV 1776 METERS SOUNDING ID 5749

DATE 11/07/77 TIME 14:01MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 500M	D/T LAPSE	WS M/S	WD DEG
	SFC		4.45		0.0		0.5	359.
0.7	150.	1926.	1.22	-3.23	-3.56	-0.65	M	M
1.2	224.	2000.	1.66	0.46	1.13	4.06	M	M
1.7	300.	2076.	1.79	0.11	-0.19	2.74	M	M
3.0	500.	2276.	1.12	-0.67	0.0	2.93	M	M
4.5	724.	2500.	1.41	0.29	-0.38	2.55	M	M
7.7	1224.	3000.	0.83	-0.57	-0.19	2.74	M	M
13.7	2224.	4000.	-4.48	-5.31	-2.49	0.44		
16.5	*2720.	4496.	-9.48		-0.78	2.15		
17.8	*2914.	4686.	-6.53		2.51	5.44		
19.8	3224.	5000.	-7.90	-3.42	-1.35	1.57		
25.5	4224.	5000.	-15.84	-7.94	-3.55	-0.62		

UTAH UAUM ELEV 1776 METERS SOUNDING ID 5749

DATE 11/07/77 TIME 14:01MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1776.	0.0	-0.5	0.5	359.

UTAH-UAUM ELEV 1676 METERS SOUNDING ID 5732

DATE 11/09/77 TIME 07:35MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN.	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T SOUM	D/T LAPSE	WS M/S	WD DEG
	SFC		-5.99		0.0		2.6	315.
0.3	* 38	1714	-5.94		0.0	0.0		
1.0	150	1826	-5.72	0.27	3.07	0.00	5.5	100.
2.0	300	1976	-4.66	-1.14	-3.45	-0.53	2.8	155.
2.1	324.	2000.	-5.94	-0.55	-3.00	-0.15	2.8	150.
3.1	500	2176	-7.08	-1.57	-0.19	-3.26	2.1	167.
4.4	824.	2560.	-10.07	-2.90	-2.92	0.01	2.4	185.
7.5	*1311	2987	-10.64		-0.39	2.58		
7.6	1324.	3000.	-13.64	-4.28	-2.16	-5.09	2.6	250.
11.3	*1682	3358	-11.20		-0.74	2.15		
14.1	2324.	4000.	-13.74	0.01	-1.37	1.55		

UTAH UAUM ELEV 1676 METERS SOUNDING ID 5732

DATE 11/09/77 TIME 07:35MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN.	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	1676.	1.8	-1.8	2.6	315.
0.5	76.	1752.	-2.4	4.9	5.4	154.
1.0	152.	1828.	-1.2	5.4	5.6	168.
1.5	229.	1905.	-0.5	3.8	3.9	172.
2.0	305.	1981.	-0.7	2.7	2.8	166.
2.5	390.	2066.	-0.8	2.9	3.0	165.
3.0	471.	2147.	-0.3	1.6	1.6	169.
3.5	548.	2224.	-1.1	3.3	3.5	161.
4.0	736.	2412.	-0.4	4.3	4.4	175.
4.5	835.	2511.	0.2	2.1	2.1	184.
5.0	911.	2587.	0.2	0.5	0.5	200.
5.5	1000.	2676.	-0.1	1.2	1.2	170.
6.0	1076.	2752.	0.1	0.9	0.9	188.
6.5	1152.	2828.	0.2	1.0	1.0	193.
7.0	1229.	2905.	0.6	2.5	2.5	193.
7.5	1311.	2987.	2.4	-1.7	2.5	254.
8.0	1388.	3064.	2.0	2.2	3.4	229.
8.5	1464.	3140.	3.5	2.4	4.3	235.
9.0	1540.	3216.	4.3	2.4	4.9	241.
9.5	1616.	3292.	2.5	5.1	7.1	245.
10.0	1692.	3368.	3.0	0.0	3.0	270.
10.5	1769.	3445.	2.1	1.9	2.8	253.
11.0	1845.	3521.	5.4	-1.2	5.6	282.
11.5	1921.	3597.	4.6	-1.5	4.9	287.
12.0	1997.	3673.	5.3	-2.1	5.7	291.

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5730

DATE 11/09/77 TIME 14:03MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T SOUN	D/T LAPSE	WS M/S	WD DEG
	SFC		2.55		4.4		1.4	180.
0.4	150.	1826.	-0.40	-2.96	-2.84	0.09	2.5	338.
1.7	324.	2000.	-2.83	-1.54	-4.38	-1.45	1.7	315.
1.6	300.	1976.	-2.62	-0.67	-4.38	-1.45	1.7	319.
2.4	500.	2176.	-3.79	-1.17	-4.21	-1.28	0.7	275.
4.4	824.	2500.	-6.43	-2.64	-1.93	1.04	0.8	228.
6.5	*1147.	2823.	-9.08		-0.56	2.35		
7.7	1324.	3000.	-7.81	-0.99	-0.58	2.35	9.6	264.
14.0	2324.	4000.	-16.86	-3.45	-0.39	2.54		

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5730

DATE 11/09/77 TIME 14:03MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1676.	-0.0	1.0	1.0	180.
0.5	76.	1752.	0.4	-1.6	1.7	346.
1.0	198.	1874.	1.2	-2.5	2.7	333.
1.5	275.	1951.	1.1	-1.4	1.8	323.
2.0	396.	2072.	1.3	-0.9	1.6	304.
2.5	522.	2198.	0.5	0.4	0.5	268.
3.0	614.	2290.	2.5	-0.2	2.5	275.
3.5	690.	2366.	0.5	4.0	4.1	187.
4.0	766.	2442.	2.1	5.1	5.6	205.
4.5	843.	2519.	5.9	4.1	7.2	250.
5.0	919.	2595.	4.3	7.2	8.4	211.
5.5	995.	2671.	7.1	4.1	8.2	240.
6.0	1071.	2747.	8.6	1.7	8.8	259.
6.5	1147.	2823.	10.0	0.0	10.0	270.
7.0	1224.	2900.	11.5	-1.0	11.8	275.
7.5	1300.	2976.	10.3	0.4	10.3	268.
8.0	1376.	3052.	8.5	1.3	8.6	261.
8.5	1452.	3128.	7.5	-1.9	7.7	285.
9.0	1528.	3204.	7.9	-3.9	9.3	302.
9.5	1611.	3287.	9.2	-5.2	10.6	305.
10.0	1708.	3384.	9.6	-7.4	12.1	308.
10.5	1784.	3460.	8.9	-11.3	14.4	322.
11.0	1861.	3537.	13.1	-7.9	15.3	301.
11.5	1937.	3613.	12.2	-10.0	15.1	311.
12.0	2013.	3689.	12.3	-11.5	16.8	313.

UTAH UAUB — ELEV 1676 METERS — SOUNDING ID 5747

DATE 11/11/77 TIME 07:27MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 500M	D/T LAPSE	WS M/S	WD DEG
	SFC		-1.49		0.0		1.0	315.
1.0	150.	1826.	-0.13	0.96	0.95	3.87	M	M
2.0	300.	1976.	0.04	0.70	1.89	4.81	M	M
2.1	324.	2000.	0.82	0.19	1.70	4.62	M	M
3.5	500.	2176.	1.78	0.96	1.31	4.24	1.8	345.
5.4	824.	2500.	3.00	1.41	1.31	4.24	1.4	306.
7.3	*1104.	2780.	4.64		-0.37	2.56		
8.7	1324.	3000.	2.93	-0.58	-1.87	1.06	4.2	186.
15.2	2324.	4000.	-0.22	-5.44	-1.76	1.22		
21.4	3324.	5000.	-8.10	-7.87	-1.74	1.19		
27.9	4324.	6000.	-14.54	-6.44	-1.97	0.96		

UTAH UAUB — ELEV 1676 METERS — SOUNDING ID 5747

DATE 11/11/77 TIME 07:27MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	1676.	0.7	-0.7	1.0	315.
			THE WIND DATA ARE MISSING			
			THE WIND DATA ARE MISSING			
			THE WIND DATA ARE MISSING			
			THE WIND DATA ARE MISSING			
2.5	381.	2057.	0.7	-2.2	2.3	342.
3.0	457.	2133.	0.6	-1.9	2.0	343.
3.5	533.	2209.	0.5	-1.6	1.7	343.
4.0	610.	2286.	-0.2	-1.0	1.0	10.
4.5	686.	2362.	-1.0	-0.7	1.2	55.
5.0	762.	2438.	0.7	-1.2	1.4	330.
5.5	838.	2514.	1.5	-0.7	1.5	300.
6.0	914.	2590.	2.7	0.8	2.8	253.
6.5	991.	2667.	3.2	3.5	3.5	135.
7.0	1067.	2743.	-0.1	3.9	3.9	179.
7.5	1143.	2819.	0.5	4.6	4.6	184.
8.0	1219.	2895.	0.3	4.5	4.6	184.
8.5	1295.	2971.	0.2	4.4	4.4	185.
9.0	1372.	3048.	0.7	4.0	4.1	190.
9.5	1448.	3124.	0.5	5.0	5.0	186.
10.0	1524.	3200.	-0.3	2.8	2.8	175.
10.5	1600.	3276.	0.0	2.9	2.9	191.

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5729

DATE 11/11/77 TIME 13:55 ST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 500M	D/T LAPSE	WS M/S	WD DEG
	SFC		8.39		9.0		0.5	180.
0.9	150	1826	6.36	-2.03	-3.80	-0.88	1.0	300.
1.0	300	1976	4.47	-1.99	1.11	4.04	2.0	313.
1.8	324.	2000.	0.64	0.15	1.11	4.04	1.8	327.
2.9	500	2176	5.54	0.96	1.48	4.41	1.1	242.
4.5	739	2415	6.00		-0.18	2.74		
5.1	824.	2500.	6.52	1.04	-1.60	1.26	7.1	175.
8.3	1324.	3000.	3.09	-2.93	-2.24	0.69	7.4	195.
14.8	2324.	4000.	-3.80	-4.49	-1.52	1.41		
21.1	3324.	5000.	-8.10	-7.30	-2.13	0.80		
27.0	4324.	6000.	-16.54	-8.45	-1.58	1.55		

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5729

DATE 11/11/77 TIME 13:55MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1676.	-0.0	0.5	0.5	180.
0.5	76.	1752.	0.9	-0.8	1.3	313.
1.0	177.	1853.	1.4	-1.0	1.7	306.
1.5	278.	1954.	1.9	-1.1	2.2	301.
2.0	359.	2035.	0.3	-1.4	1.0	346.
2.5	435.	2111.	-0.4	-0.9	0.9	24.
3.0	511.	2187.	0.9	0.7	1.1	232.
3.5	587.	2263.	1.6	0.8	2.0	240.
4.0	663.	2339.	-1.2	3.8	4.0	163.
4.5	740.	2416.	-1.0	4.9	5.0	169.
5.0	816.	2492.	-0.7	7.1	7.1	174.
5.5	892.	2568.	0.2	7.0	7.0	181.
6.0	968.	2644.	0.7	7.2	7.3	186.
6.5	1044.	2720.	1.1	6.8	6.9	190.
7.0	1121.	2797.	2.1	7.0	7.3	197.
7.5	1197.	2873.	2.4	8.0	8.3	197.
8.0	1273.	2949.	2.2	6.7	7.1	198.
8.5	1349.	3025.	2.4	7.3	7.6	198.
9.0	1425.	3101.	2.2	7.6	7.9	196.
9.5	1509.	3185.	1.9	7.7	7.9	192.
10.0	1585.	3261.	1.5	8.0	8.1	191.
10.5	1661.	3337.	1.8	7.9	8.1	193.
11.0	1737.	3413.	2.1	7.5	7.8	196.
11.5	1813.	3489.	3.5	7.2	8.0	206.
12.0	1890.	3566.	4.4	6.9	8.1	213.

UTAH UAUB — ELEV 1676 METERS — SOUNDING ID 5739

DATE 11/13/77 TIME 07:26MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		-0.13		0.0		1.0	315.
1.0	150	1826	1.11	1.24	3.57	6.56	0.8	245.
2.0	300	1976	2.84	1.72	1.67	4.80	1.1	341.
2.1	324.	2000.	3.22	0.18	1.87	4.80	1.1	325.
3.3	500	2176	3.97	0.95	0.75	3.67	0.7	265.
4.5	* 685	2361	4.36		-0.93	2.00		
5.4	824.	2500.	3.00	-0.87	-1.50	1.43	4.9	167.
8.7	1324.	3000.	0.55	-2.86	-1.89	1.04	6.6	207.
15.0	2324.	4000.	-5.74	-6.48	-2.50	0.43		
21.5	3324.	5000.	-14.64	-8.50	-3.14	-0.21		
28.8	4324.	6000.	-23.91	-9.67	-5.01	-2.68		

UTAH UAUB — ELEV 1676 METERS — SOUNDING ID 5739

DATE 11/13/77 TIME 07:26MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1676.	0.7	-0.7	1.0	315.
0.5	76.	1752.	0.0	0.0	0.0	231.
1.0	152.	1828.	0.7	0.3	0.8	246.
1.5	229.	1905.	0.9	-1.0	1.1	330.
2.0	305.	1981.	0.4	-1.1	1.1	341.
2.5	381.	2057.	0.9	-0.1	0.9	276.
3.0	457.	2133.	0.2	-0.4	0.5	331.
3.5	533.	2209.	0.8	0.2	0.8	255.
4.0	610.	2286.	-0.9	3.5	3.7	166.
4.5	686.	2362.	-0.4	5.0	5.0	175.
5.0	762.	2438.	1.4	4.1	4.3	199.
5.5	838.	2514.	-1.8	4.8	5.1	160.
6.0	914.	2590.	1.7	5.0	5.9	197.
6.5	991.	2667.	2.4	5.4	6.0	204.
7.0	1067.	2743.	2.3	5.8	6.2	202.
7.5	1143.	2819.	2.1	5.9	6.2	200.
8.0	1219.	2895.	2.1	6.1	6.5	199.
8.5	1295.	2971.	3.0	6.2	6.9	206.
9.0	1372.	3048.	3.0	5.5	6.2	209.
9.5	1448.	3124.	3.6	5.0	6.2	216.
10.0	1524.	3200.	4.9	4.9	6.9	225.
10.5	1600.	3276.	6.2	5.1	8.0	231.
11.0	1676.	3352.	6.0	5.6	8.2	227.
11.5	1753.	3429.	6.5	5.6	8.4	229.
12.0	1829.	3505.	5.5	7.0	8.5	223.

UTAH UAUM ELEV 1676 METERS SOUNDING ID 5730

DATE 11/13/77 TIME 14:01MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T SOUM	D/T LAPSE	WS M/S	WD DEG
	SFC						0.7	180.
1.0	150.	1826.					0.5	322.
2.0	300.	1976.					1.0	275.
2.1	324.	2000.					1.1	275.
3.3	500.	2176.					2.1	104.
5.4	824.	2500.					9.0	177.
8.7	1324.	3000.					11.6	214.

UTAH UAUM ELEV 1676 METERS SOUNDING ID 5730

DATE 11/13/77 TIME 14:01MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	1676.	-0.0	0.7	0.7	180.
0.5	76.	1752.	-0.1	-0.7	0.7	12.
1.0	152.	1828.	0.2	-0.4	0.5	332.
1.5	229.	1905.	0.9	-0.2	0.9	285.
2.0	305.	1981.	1.0	-0.1	1.0	274.
2.5	381.	2057.	1.4	-0.0	1.4	271.
3.0	457.	2133.	0.7	0.9	1.1	217.
3.5	533.	2209.	-0.7	2.8	2.9	165.
4.0	610.	2286.	-0.8	5.4	5.5	172.
4.5	686.	2362.	-1.1	8.7	8.8	171.
5.0	762.	2438.	-0.9	8.3	8.3	174.
5.5	838.	2514.	-0.4	9.1	9.2	177.
6.0	914.	2590.	-0.0	9.7	9.7	180.
6.5	991.	2667.	1.7	8.1	8.3	192.
7.0	1067.	2743.	2.7	7.2	7.8	201.
7.5	1143.	2819.	3.2	7.7	8.4	203.
8.0	1219.	2895.	4.8	10.3	11.3	205.
8.5	1295.	2971.	5.1	9.8	11.0	212.
9.0	1372.	3048.	7.2	9.1	11.6	219.
9.5	1448.	3124.	7.2	9.2	12.0	217.
10.0	1524.	3200.	8.6	9.0	12.9	222.
10.5	1600.	3276.	7.5	9.1	11.6	219.
11.0	1676.	3352.	7.9	9.7	12.5	219.
11.5	1753.	3429.	10.5	6.8	12.3	230.
12.0	1829.	3505.	5.8	9.4	11.1	212.

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5755

DATE 11/15/77 TIME 07:40MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 500M	D/T LAPSE	WS M/S	WD DEG
	SFC		0.83		0.0		3.6	315.
1.0	150	1826	5.39	4.56	0.0	2.93	5.2	157.
1.0	* 152	1828	5.39		0.0	2.93		
2.0	300	1976	4.45	-0.94	-2.05	0.88	5.4	215.
2.1	324.	2000.	3.79	-1.10	-2.99	-0.06	5.3	217.
3.3	500	2176	2.68	-1.61	-1.31	1.62	5.6	220.
5.4	824.	2500.	0.93	-1.72	-1.88	1.05	3.8	252.
8.7	1324.	3000.	-1.86	-2.70	-0.95	1.98	2.3	194.
15.2	2324.	4000.	-5.94	-4.18	-3.85	-0.92		

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5755

DATE 11/15/77 TIME 07:40MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	1676.	2.6	-2.5	3.6	315.
0.5	76.	1752.	-2.7	5.9	6.5	155.
1.0	152.	1828.	-2.0	4.7	5.1	157.
1.5	229.	1905.	3.6	5.7	6.8	212.
2.0	305.	1981.	3.1	4.3	5.3	215.
2.5	381.	2057.	3.4	3.9	5.2	220.
3.0	457.	2133.	1.2	4.8	4.9	194.
3.5	533.	2209.	5.7	2.9	6.4	251.
4.0	610.	2286.	2.4	2.7	3.6	222.
4.5	686.	2362.	1.7	2.9	3.3	211.
5.0	762.	2438.	2.2	2.2	3.1	225.
5.5	838.	2514.	3.2	2.4	4.0	233.
6.0	914.	2590.	1.2	2.4	2.7	206.
6.5	991.	2667.	0.1	2.1	2.1	180.
7.0	1067.	2743.	0.2	3.8	3.8	183.
7.5	1143.	2819.	-1.2	2.9	3.1	158.
8.0	1219.	2895.	-0.7	2.2	2.3	162.
8.5	1295.	2971.	0.1	2.0	2.0	182.
9.0	1372.	3048.	1.0	2.4	2.9	214.
9.5	1448.	3124.	3.3	3.3	4.7	225.
10.0	1524.	3200.	-0.0	5.9	5.9	180.
10.5	1600.	3276.	7.8	2.0	8.1	251.
11.0	1676.	3352.	1.8	5.4	5.7	198.
11.5	1753.	3429.	1.6	5.5	5.8	205.
12.0	1829.	3505.	3.5	3.0	4.6	230.

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5937

DATE 11/15/77 TIME 14:21 MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T SOUM	D/T LAPSE	WS M/S	WD DEG
	SFC		10.25		0.0		1.5	45.
1.0	? 150.	1826.	9.15	-1.11	-2.74	0.18	1.4	244.
1.9	? 300.	1976.	7.48	-1.56	-2.90	-0.02	1.9	255.
2.1	324.	?2000.	7.20	-0.28	-2.21	0.71	2.0	249.
3.2	? 500.	2176.	6.06	-1.15	-2.22	0.70	3.4	256.
5.3	824.	?2500.	3.51	-2.55	-2.24	0.69	8.5	271.
8.6	1324.	?3000.	-0.21	-3.73	-4.17	-1.24	12.3	276.
14.4	2324.	4000.	-8.88	-8.67	-2.52	0.41		
20.8	3324.	5000.	-15.04	-6.16	-1.18	1.75		

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5937

DATE 11/15/77 TIME 14:21MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1676.	-1.1	-1.1	1.5	45.
0.5	76.	1752.	1.0	0.0	1.1	240.
1.0	152.	1828.	1.2	0.0	1.4	245.
1.5	232.	1908.	1.4	0.2	1.4	269.
2.0	316.	1992.	1.8	0.7	2.0	249.
2.5	393.	2069.	2.4	0.9	2.6	249.
3.0	469.	2145.	2.7	0.9	2.9	253.
3.5	545.	2221.	4.1	0.7	4.2	261.
4.0	621.	2297.	5.8	0.9	5.8	261.
4.5	697.	2373.	5.6	1.0	5.7	259.
5.0	774.	2450.	7.4	0.5	7.4	266.
5.5	850.	2526.	9.1	-0.4	9.1	272.
6.0	926.	2602.	9.8	-0.5	9.8	272.
6.5	1002.	2678.	11.0	-0.1	11.0	271.
7.0	1078.	2754.	11.0	0.1	11.0	270.
7.5	1154.	2830.	12.1	-0.7	12.1	273.
8.0	1231.	2907.	12.1	-1.2	12.2	275.
8.5	1307.	2983.	12.0	-1.2	12.1	276.
9.0	1413.	3089.	13.3	-1.6	13.4	277.
9.5	1519.	3195.	12.8	-1.1	12.9	275.
10.0	1595.	3271.	6.8	-1.2	6.9	280.
10.5	1671.	3347.	6.9	-2.9	8.7	295.
11.0	1747.	3423.	8.0	-4.8	9.2	306.
11.5	1823.	3499.	8.2	-5.1	9.6	302.
12.0	1900.	3576.	7.4	-4.8	8.8	303.

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5936

DATE 11/17/77 TIME 07:37MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		-1.09		0.0		4.1	270.
1.0	150	1826	-2.15	-1.06	-1.52	1.41	M	M
2.0	300	1976	-2.73	-0.58	-2.86	0.07		
2.1	324.	2000.	-3.56	-0.83	-3.25	-0.32	M	M
3.2	500	2176	-4.58	-1.31	-1.92	1.01	M	M
3.5	* 546	2222	-5.10		-0.96	1.97		
5.3	824.	2500.	-5.64	-0.77	-1.15	1.78	M	M

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5936

DATE 11/17/77 TIME 07:37MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	1676.	4.1	0.0	4.1	270.

UTAH UADB ELEV 1676 METERS SOUNDING ID 5746

DATE 11/21/77 TIME 14:10MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T SOND	D/T LAPSE	WS M/S	WD DEG
	SFC		-3.51		0.0		1.0	135.
0.7	150.	1826.	-7.09	-3.58	-1.35	1.58	2.0	321.
1.3	* 265.	1941.	-7.90		-0.95	3.89		
1.5	300.	1976.	-7.01	-0.52	3.47	6.48	2.2	357.
1.8	324.	2000.	-5.65	0.93	7.31	10.23	2.1	354.
2.8	500.	2176.	-2.09	4.59	5.90	8.83	3.9	249.
4.9	624.	2300.	0.93	5.02	0.76	5.08	15.9	195.
5.0	* 837.	2513.	0.93		0.76	3.68		
8.1	1324.	3000.	-3.99	-4.92	-4.40	-1.47	14.4	208.
9.3	*1527.	3203.	-4.87		2.29	5.22		
10.5	*1717.	3393.	-1.58		-0.57	2.50		
14.5	2324.	4000.	-4.96	-1.46	-3.26	-0.33		

UTAH UADB ELEV 1676 METERS SOUNDING ID 5746

DATE 11/21/77 TIME 14:10MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1676.	-0.7	0.7	1.0	135.
0.5	76.	1752.	1.1	-1.1	1.5	315.
1.0	228.	1904.	1.4	-2.1	2.5	327.
1.5	304.	1980.	0.1	-2.1	2.1	358.
2.0	380.	2056.	0.5	-1.9	2.0	344.
2.5	456.	2132.	3.4	-0.9	3.5	285.
3.0	532.	2208.	2.7	3.1	4.1	221.
3.5	609.	2285.	3.0	6.8	7.5	204.
4.0	685.	2361.	2.9	10.0	10.3	195.
4.5	761.	2437.	3.1	11.9	12.2	195.
5.0	837.	2513.	3.7	13.8	14.2	195.
5.5	913.	2589.	3.6	12.4	13.0	197.
6.0	990.	2666.	4.8	12.1	13.1	202.
6.5	1066.	2742.	4.9	11.5	12.5	203.
7.0	1142.	2818.	5.0	11.7	12.9	206.
7.5	1219.	2895.	6.1	12.0	13.9	206.
8.0	1294.	2970.	6.5	12.5	14.1	207.
8.5	1395.	3071.	7.1	13.5	15.2	208.
9.0	1489.	3165.	7.5	12.4	14.5	211.
9.5	1565.	3241.	8.7	10.9	13.9	219.

UTAH UAUB — ELEV 1670 METERS — SOUNDING ID 5760

DATE 11/23/77 TIME 07:51MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 500M	D/T LAPSE	WS M/S	WD DEG
	SFC		4.17		0.0		1.0	270.
0.5	* 76	1752	5.05		3.16	6.09		
1.0	150	1826	5.77	1.01	-0.95	2.00	0.2	209.
2.0	300	1976	5.40	-0.38	-2.79	0.14	2.1	258.
2.1	324.	2000.	4.17	-0.49	-3.54	-4.61	2.3	265.
3.1	500	2176.	3.05	-2.25	-2.06	0.87	7.7	280.
5.2	824.	2500.	1.00	-1.30	-0.94	1.99	11.4	287.
8.4	1324.	3000.	-2.54	-4.22	-4.76	-1.83	9.6	285.
13.8	2324.	4000.	-11.05	-9.12	-1.76	1.17		
20.0	3324.	5000.	-20.66	-9.01	-3.78	-4.45		

UTAH UAUB — ELEV 1670 METERS — SOUNDING ID 5760

DATE 11/23/77 TIME 07:51MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1670.	1.0	0.0	1.0	270.
0.5	76.	1752.	0.4	0.1	0.4	282.
1.0	152.	1828.	0.2	0.0	0.2	209.
1.5	229.	1905.	0.3	0.4	0.5	216.
2.0	305.	1981.	2.1	0.4	2.2	281.
2.5	383.	2059.	2.6	-0.0	2.9	283.
3.0	485.	2161.	7.5	-2.1	7.7	285.
3.5	561.	2237.	7.0	-2.3	7.4	289.
4.0	637.	2313.	8.5	-2.5	8.8	285.
4.5	713.	2389.	9.3	-1.5	9.5	279.
5.0	790.	2466.	12.1	-3.0	12.9	283.
5.5	866.	2542.	9.1	-2.9	9.6	287.
6.0	942.	2618.	9.8	-3.8	10.5	291.
6.5	1018.	2694.	8.9	-3.2	9.2	291.
7.0	1094.	2770.	8.5	-3.1	9.1	290.
7.5	1171.	2847.	8.2	-2.7	8.7	289.
8.0	1250.	2926.	9.0	-2.6	9.3	286.
8.5	1349.	3025.	9.3	-2.4	9.7	284.
9.0	1467.	3143.	8.0	-2.3	8.3	283.
9.5	1569.	3245.	7.0	-2.3	7.4	288.
10.0	1653.	3329.	8.2	-2.7	8.6	285.
10.5	1756.	3432.	8.9	-3.7	9.6	293.
11.0	1871.	3547.	8.8	-5.0	10.1	300.
11.5	1947.	3623.	6.7	-6.2	9.1	313.
12.0	2024.	3700.	6.7	-6.5	9.3	315.

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5758

DATE 11/23/77 TIME 14:07MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 500M	D/T LAPSE	WS M/S	WD DEG
	SFC		8.39		6.0		1.0	155.
0.8	150.	1826.	5.51	-2.88	-2.04	0.89	2.9	300.
1.7	300.	1976.	5.12	-0.39	-1.49	1.44	5.6	275.
1.8	324.	2000.	4.92	-0.18	-1.49	1.44	6.0	295.
3.0	500.	2176.	4.36	-0.58	-1.49	1.44	7.8	269.
4.9	824.	2500.	1.60	-2.76	-5.27	-2.34	8.2	283.
7.7	1324.	3000.	-3.51	-4.82	-2.29	0.04	6.6	269.
13.6	2324.	4000.	-10.85	-7.64	-2.55	0.40		
15.0	*2539	4215	-13.96		1.75	4.68		
15.8	*2654	4330	-9.38		1.36	4.29		
19.8	3324.	5000.	-15.74	-4.88	-3.90	-1.01		

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5758

DATE 11/23/77 TIME 14:07MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1676.	-0.7	0.7	1.0	135.
0.5	76.	1752.	1.3	-0.9	1.6	304.
1.0	200.	1876.	3.3	-1.7	3.8	297.
1.5	277.	1953.	4.5	-2.4	5.2	298.
2.0	353.	2029.	5.1	-2.5	5.5	291.
2.5	429.	2105.	5.0	-2.4	5.4	295.
3.0	505.	2181.	7.4	-2.6	7.8	289.
3.5	581.	2257.	10.0	-3.3	10.5	288.
4.0	658.	2334.	8.4	-2.8	8.9	289.
4.5	739.	2415.	8.3	-2.5	8.8	290.
5.0	836.	2512.	7.7	-2.5	8.1	288.
5.5	956.	2632.	9.4	-3.5	9.9	289.
6.0	1054.	2730.	8.0	-1.9	8.2	284.
6.5	1130.	2806.	5.6	-0.5	5.5	275.
7.0	1212.	2888.	6.3	1.1	6.5	260.
7.5	1288.	2964.	5.9	2.0	6.3	251.
8.0	1364.	3040.	6.4	2.7	6.9	247.
8.5	1441.	3117.	6.2	2.9	6.9	245.
9.0	1527.	3203.	6.8	3.2	7.3	250.
9.5	1618.	3294.	5.6	2.5	6.2	247.
10.0	1694.	3370.	5.3	2.7	5.9	238.
10.5	1776.	3452.	5.0	1.8	5.3	252.
11.0	1846.	3522.	4.7	1.3	4.9	255.
11.5	1926.	3602.	5.0	0.8	5.1	262.
12.0	2002.	3678.	4.5	-0.2	4.5	272.

UTAH-UAUB ELEV 1676-METERS SOUNDING ID -5756

DATE 11/27/77 TIME 08:06MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 500M	D/T LAPSE	WS M/S	WD DEG
	SFC		0.45		0.0		1.6	155.
1.0	150	1826	1.42	0.57	1.61	4.43	1.7	203.
2.0	300	1976	1.58	0.60	1.13	4.06	3.0	225.
2.1	324.	2000.	2.08	0.09	1.31	4.24	3.4	224.
3.3	500	2176	2.65	0.80	0.0	2.93	5.1	232.
3.5	* 533	2209	2.84		0.0	2.93		
5.4	824.	2500.	1.02	-1.80	-2.04	0.29	9.3	271.
8.7	1324.	3000.	-2.73	-3.18	-3.05	-0.12	18.9	281.
14.8	2324.	4000.	-10.85	-8.12	-5.76	-0.77		
17.8	*2804	4480	-13.84		0.39	5.32		
21.2	3324.	5000.	-13.74	-2.96	-2.16	0.77		

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5756

DATE 11/27/77 TIME 08:06MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1676.	-0.7	0.7	1.0	135.
0.5	76.	1752.	1.1	1.3	1.7	221.
1.0	152.	1828.	0.6	1.5	1.7	202.
1.5	229.	1905.	1.1	0.7	1.3	237.
2.0	305.	1981.	2.0	2.3	3.1	222.
2.5	381.	2057.	4.3	1.5	4.5	250.
3.0	457.	2133.	4.0	3.0	5.0	233.
3.5	533.	2209.	5.5	4.3	7.0	232.
4.0	610.	2286.	9.3	0.3	9.3	268.
4.5	686.	2362.	8.3	-0.7	8.4	275.
5.0	762.	2438.	10.1	0.2	10.1	269.
5.5	838.	2514.	9.1	-0.2	9.1	272.
6.0	914.	2590.	10.1	0.7	10.2	266.
6.5	991.	2667.	7.0	10.5	12.6	214.
7.0	1067.	2743.	13.0	4.1	13.6	252.
7.5	1143.	2819.	12.7	4.4	13.4	251.
8.0	1219.	2895.	17.3	-1.4	17.3	275.
8.5	1295.	2971.	18.5	-7.0	20.0	292.
9.0	1372.	3048.	16.8	2.1	17.0	263.
9.5	1448.	3124.	12.8	1.2	12.5	264.
10.0	1524.	3200.	11.0	-0.1	11.0	270.
10.5	1600.	3276.	13.0	0.7	13.0	267.
11.0	1676.	3352.	14.3	1.0	14.3	266.
11.5	1752.	3428.	13.4	1.9	13.5	262.
12.0	1828.	3504.	12.5	0.5	12.6	268.

UTAH-UAUB- ELEV-1676 METERS SOUNDING ID 5754

DATE 11/27/77 TIME 14:01MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 500M	D/T LAPSE	WS M/S	WD DEG
	SFC		8.39		0.0		1.6	345.
1.0	150	1826	7.28	-1.12	-2.76	0.16	2.4	138.
2.0	300	1976	6.06	-1.22	-1.40	1.45	2.3	140.
2.1	324.	2000.	5.77	-0.18	-1.85	1.07	2.5	155.
3.3	500	2176	4.46	-1.41	-3.91	-0.99	3.2	182.
5.2	824.	2500.	1.31	-2.86	-2.63	0.29	3.1	210.
6.5	1324.	3000.	-1.67	-5.27	-2.85	0.08	7.6	221.
14.7	2324.	4000.	-10.86	-9.19	-1.95	0.98		
21.1	3324.	5000.	-16.54	-5.68	-1.14	1.74		

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5754

DATE 11/27/77 TIME 14:01MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	1676.	0.3	-1.0	1.0	345.
0.5	76.	1752.	-2.3	1.5	2.7	122.
1.0	152.	1828.	-1.6	1.8	2.4	139.
1.5	229.	1905.	-1.4	1.5	1.6	133.
2.0	305.	1981.	-1.3	2.0	2.4	147.
2.5	381.	2057.	-0.1	2.9	2.9	178.
3.0	457.	2133.	0.1	3.2	3.2	181.
3.5	533.	2210.	0.2	3.1	3.1	183.
4.0	633.	2309.	0.6	3.7	3.8	190.
4.5	720.	2396.	1.3	3.8	3.9	205.
5.0	797.	2473.	1.8	2.8	3.3	212.
5.5	873.	2549.	1.9	2.1	2.8	222.
6.0	949.	2625.	2.5	1.7	3.1	236.
6.5	1025.	2701.	4.2	3.0	5.4	232.
7.0	1101.	2777.	4.2	3.1	5.3	235.
7.5	1178.	2854.	5.3	4.7	8.1	234.
8.0	1254.	2930.	7.0	3.3	7.7	245.
8.5	1330.	3006.	5.1	4.8	7.0	227.
9.0	1412.	3088.	10.4	1.5	10.5	262.
9.5	1499.	3175.	9.2	2.0	9.2	257.
10.0	1581.	3257.	9.5	2.0	9.7	258.
10.5	1661.	3337.	10.0	1.8	10.2	260.
11.0	1737.	3413.	10.8	0.3	10.8	268.
11.5	1813.	3489.	10.9	-1.1	10.9	276.
12.0	1899.	3575.	10.8	-1.3	10.9	277.

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5759

DATE 11/29/77 TIME 07:31MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 500M	D/T LAPSE	WS M/S	WD DEG
	SFC		4				2.9	315
1.0	150	1826					8.9	154
2.0	300	1976					8.9	155
2.1	324.	2000.					9.5	162.
3.3	500	2176					4.2	176.
5.4	824.	2500.					6.0	200.
8.7	1324.	3000.					8.7	259

UTAH UAUB ELEV 1676 METERS SOUNDING ID 5759

DATE 11/29/77 TIME 07:31MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WIND SPEED M/S	WIND DIR DEG
0.0	0.	1676.	1.8	-1.8	2.6	315.
0.5	76.	1752.	-2.0	4.0	5.3	151.
1.0	152.	1828.	-4.5	7.8	9.0	150.
1.5	229.	1905.	-4.1	8.5	9.5	154.
2.0	305.	1981.	-2.0	6.4	6.7	163.
2.5	381.	2057.	-1.6	4.7	4.9	161.
3.0	457.	2133.	-0.2	4.1	4.1	177.
3.5	535.	2209.	-0.4	4.2	4.2	175.
4.0	610.	2286.	0.5	5.0	5.0	186.
4.5	686.	2362.	0.2	7.1	7.1	182.
5.0	762.	2438.	1.1	6.8	6.9	189.
5.5	838.	2514.	2.2	5.3	5.7	202.
6.0	914.	2590.	2.7	5.1	5.7	208.
6.5	991.	2667.	3.0	5.1	5.9	211.
7.0	1067.	2743.	3.4	4.8	5.9	215.
7.5	1143.	2819.	5.6	4.9	7.4	229.
8.0	1219.	2895.	7.1	5.6	8.1	242.
8.5	1295.	2971.	7.5	4.5	8.7	239.
9.0	1372.	3048.	7.5	4.5	8.7	239.
9.5	1448.	3124.	6.9	3.8	7.9	241.
10.0	1524.	3200.	6.8	4.6	8.3	236.
10.5	1600.	3276.	7.8	5.0	9.3	235.
11.0	1676.	3352.	8.9	7.1	11.4	232.
11.5	1753.	3429.	9.1	8.3	12.3	228.
12.0	1829.	3505.	8.1	7.0	10.7	229.

UTAH UAUM — ELEV 1676 METERS — SOUNDING ID 5757

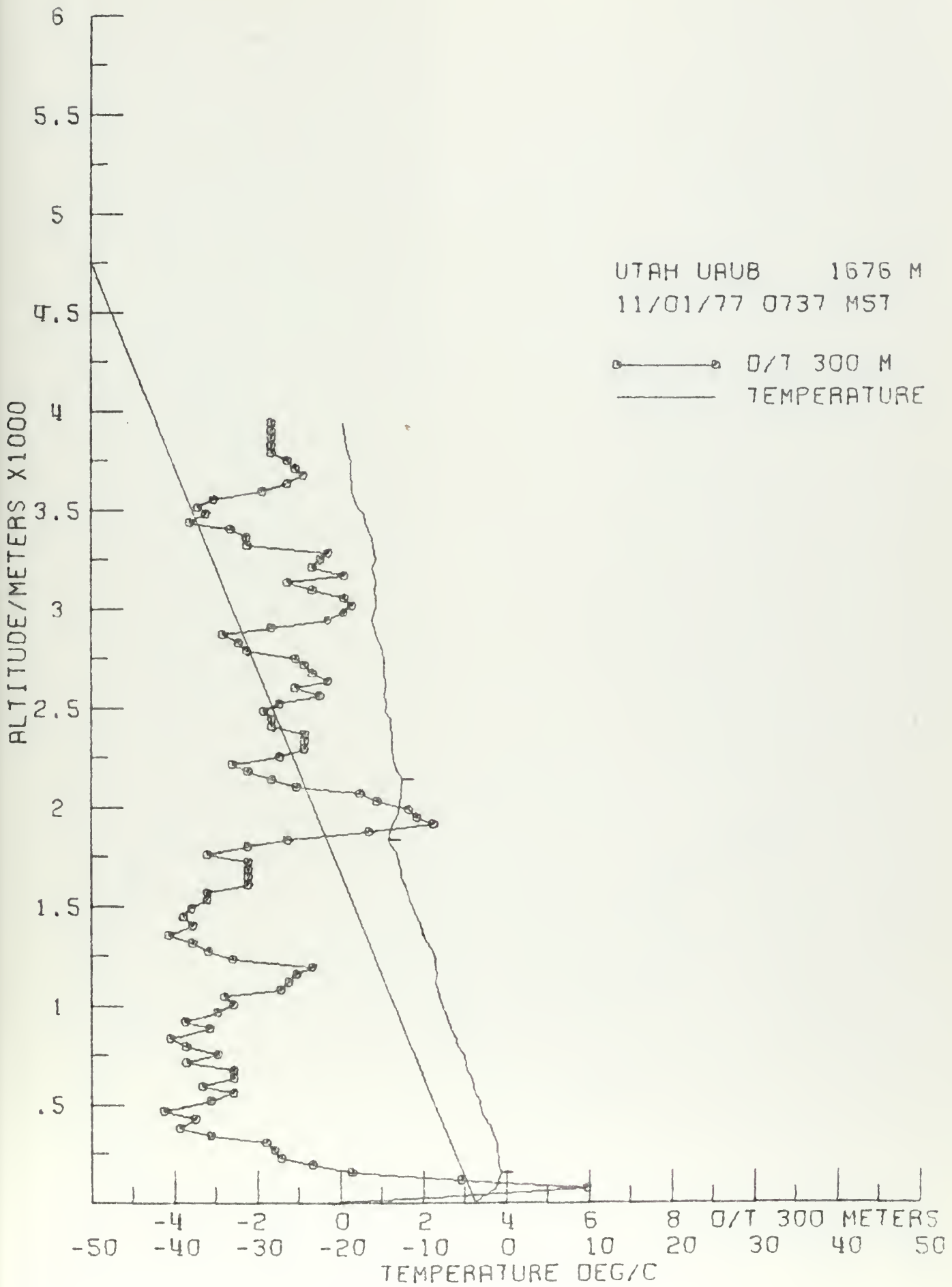
DATE 11/29/77 TIME 13:48MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN SEC	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T SOUN	D/T LAPSE	WS M/S	WD DEG
			5.50		0.0		1.0	225.
0.9	150	1826	3.52	-2.06	-2.43	0.50	1.5	142.
1.8	* 280	1956	3.03		0.50	3.49		
1.9	300	1976	3.21	-0.31	1.31	4.24	3.0	174.
2.4	324.	2000.	3.88	0.44	0.0	2.93	3.5	174.
2.5	* 394	2070	3.88		0.0	2.93		
3.2	500	2175	2.08	-1.86	-1.87	1.06	8.2	186.
5.3	824.	2500.	-0.13	-2.95	-1.89	1.04	9.2	207.
8.5	1324.	3000.	-3.02	-2.72	-1.53	1.40	11.1	251.
9.5	*1469	3145	-3.51		1.90	4.83		
11.4	*1811	3487	-0.32		-0.19	2.74		
16.1	2324.	4000.	-3.99	-1.16	-3.25	-0.33		
21.6	3324.	5000.	-10.07	-0.03	-2.92	0.01		

UTAH UAUM — ELEV 1676 METERS — SOUNDING ID 5757

DATE 11/29/77 TIME 13:48MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1676.	0.7	0.7	1.0	225.
0.5	76.	1752.	-0.9	0.8	1.0	112.
1.0	166.	1842.	-0.7	1.5	1.7	157.
1.5	242.	1918.	-0.1	2.1	2.1	177.
2.0	319.	1995.	-0.1	3.3	3.3	178.
2.5	395.	2071.	1.3	5.4	5.5	194.
3.0	471.	2147.	-0.5	8.4	8.4	176.
3.5	547.	2223.	0.8	7.9	7.9	186.
4.0	623.	2299.	1.9	8.4	8.6	193.
4.5	705.	2381.	3.1	9.0	9.9	198.
5.0	783.	2459.	0.1	7.9	8.0	207.
5.5	859.	2535.	4.2	8.5	9.5	206.
6.0	936.	2612.	5.6	9.2	10.8	211.
6.5	1012.	2688.	8.1	9.2	12.3	221.
7.0	1088.	2764.	7.0	7.5	10.3	223.
7.5	1164.	2840.	10.0	6.7	12.0	250.
8.0	1240.	2916.	9.5	5.8	11.1	239.
8.5	1317.	2993.	10.3	5.9	11.9	240.
9.0	1393.	3069.	12.7	1.1	12.7	265.
9.5	1469.	3145.	11.2	-0.5	11.2	273.
10.0	1545.	3221.	11.9	0.1	11.9	270.
10.5	1621.	3297.	15.3	-2.9	15.6	281.
11.0	1698.	3374.	14.1	-3.0	14.3	281.
11.5	1774.	3450.	12.7	-1.5	12.8	277.
12.0	1850.	3526.	13.0	-2.5	13.3	261.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11/01/77 0737 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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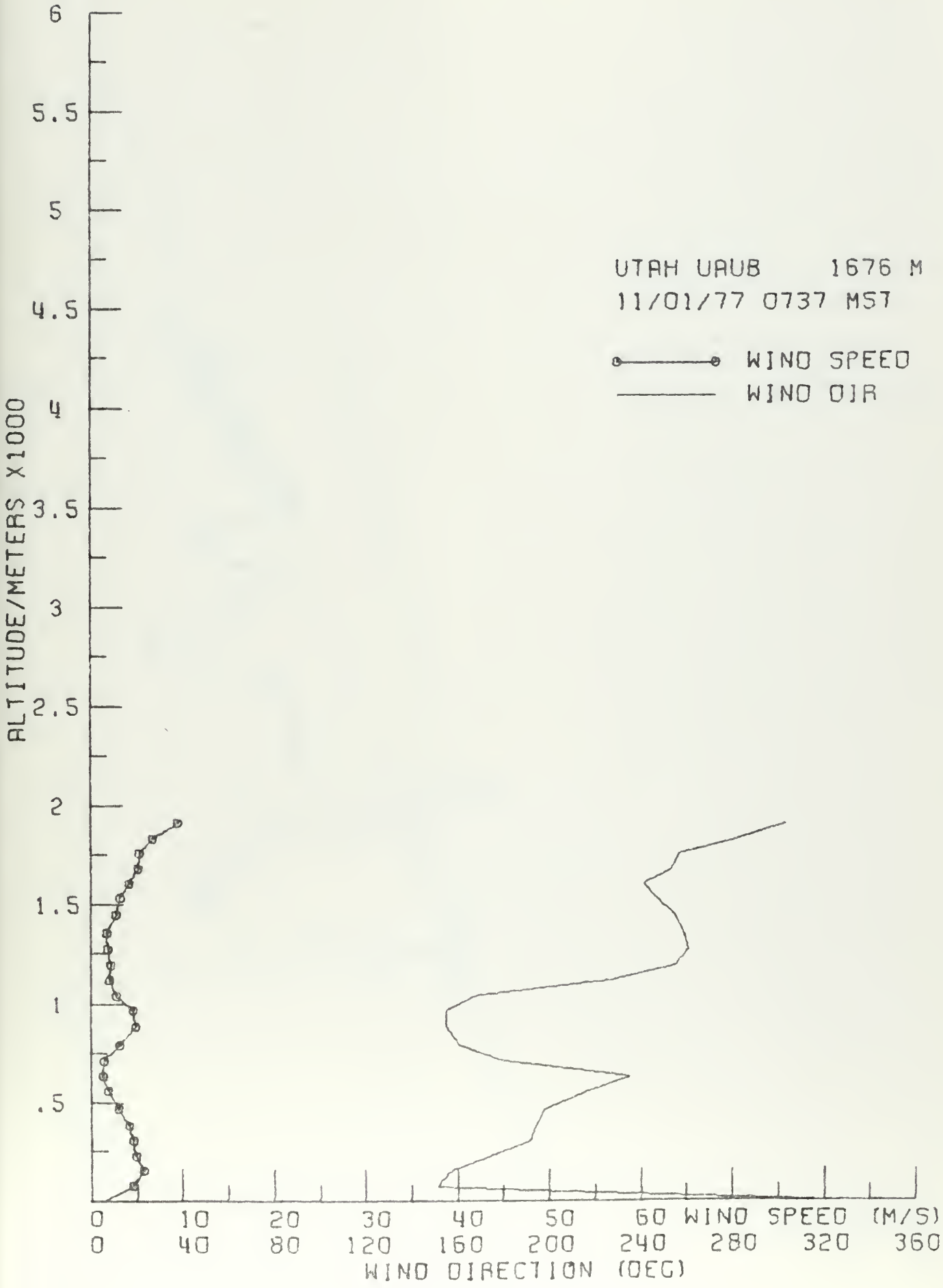
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 O/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/01/77 0737 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
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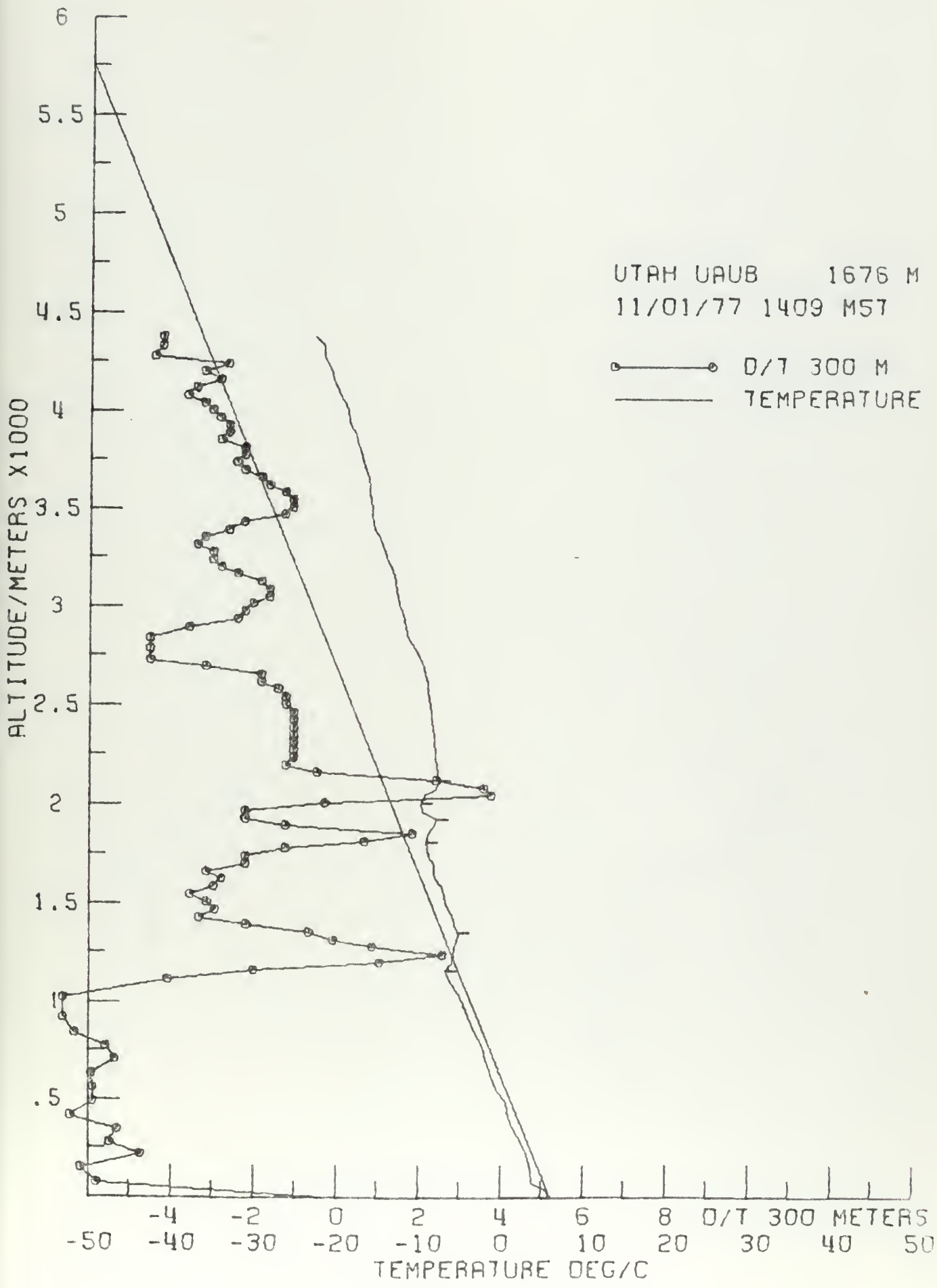
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1676 M
11/01/77 1409 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
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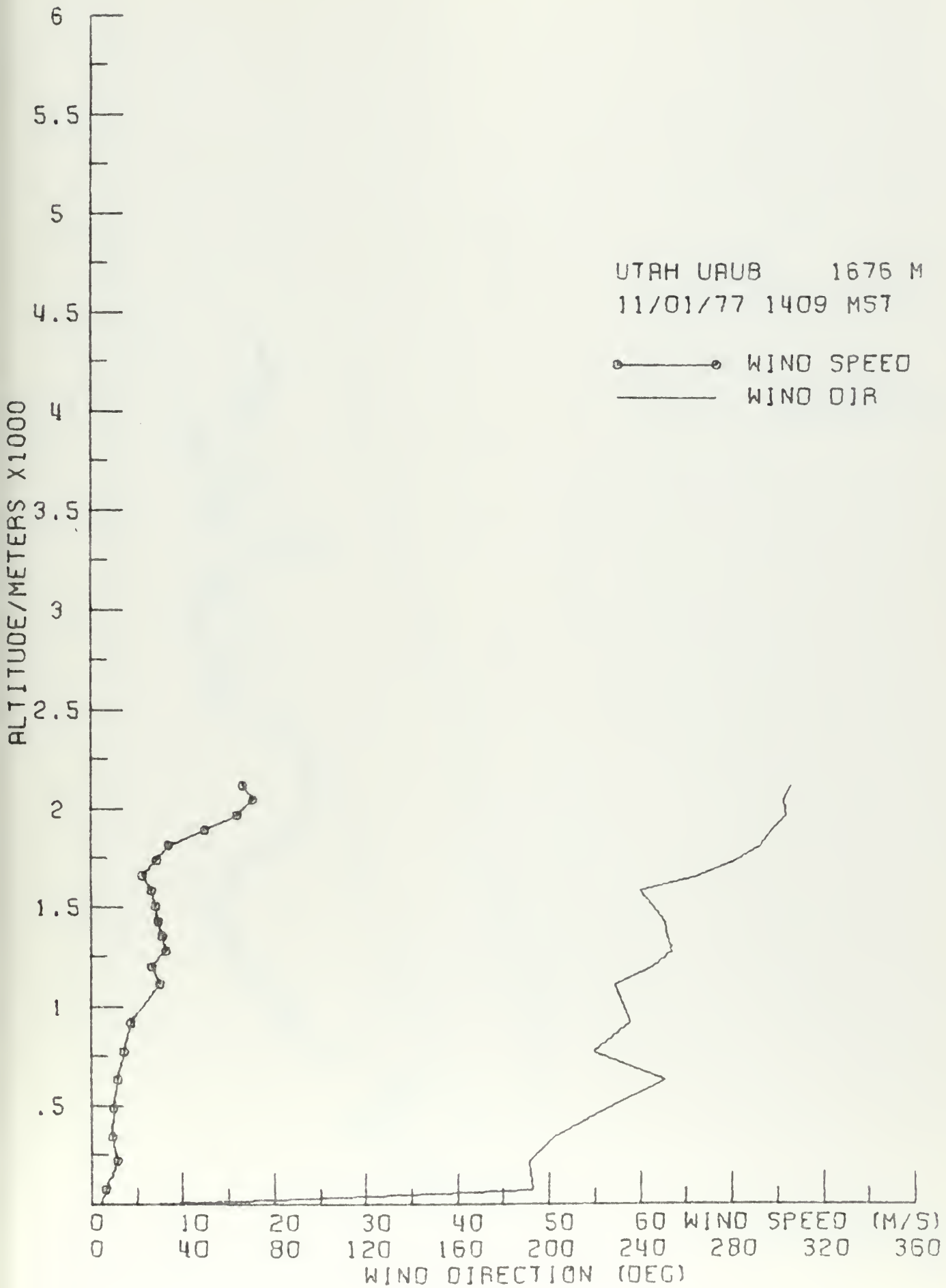
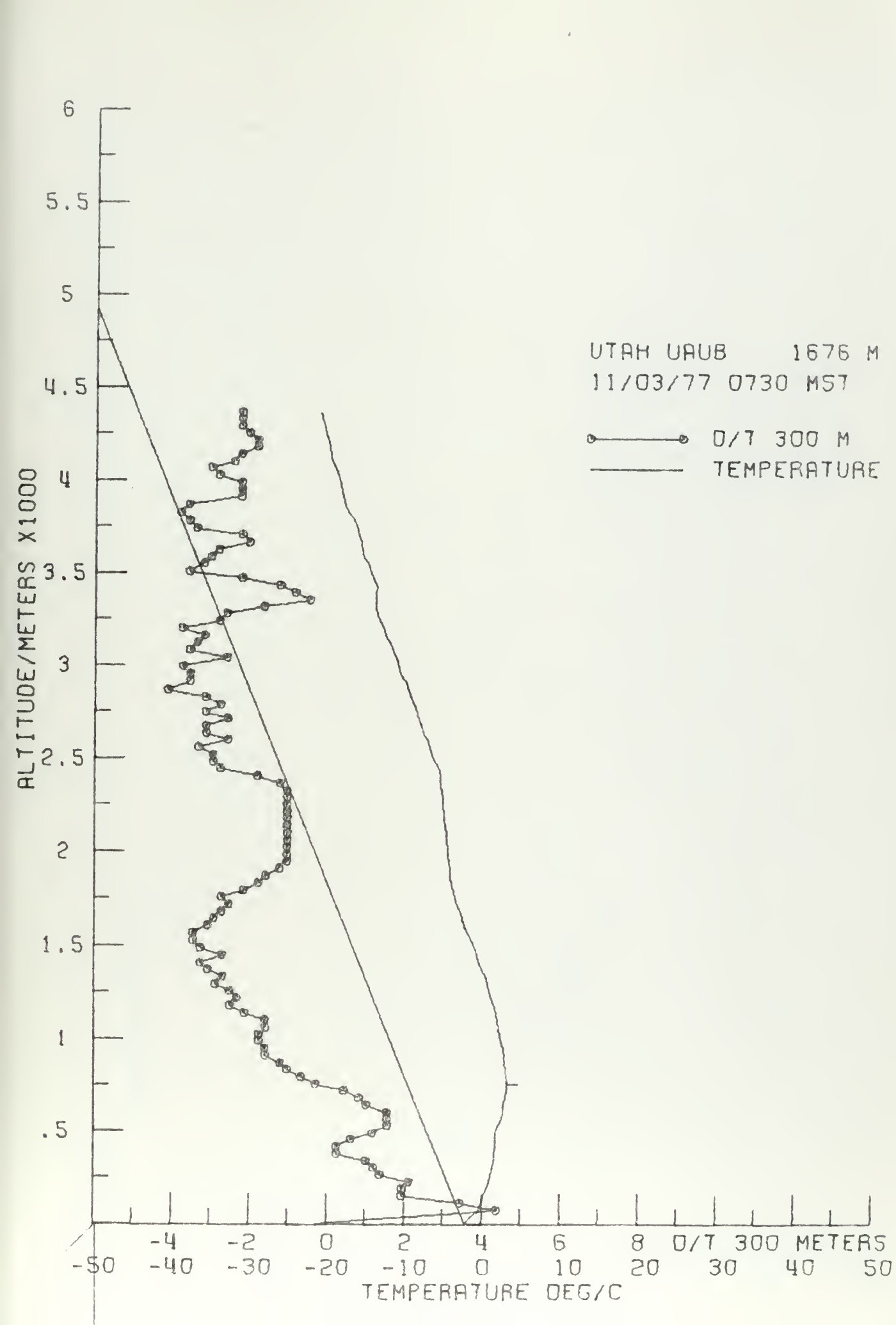
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/01/77 1409 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1676 M
11/03/77 0730 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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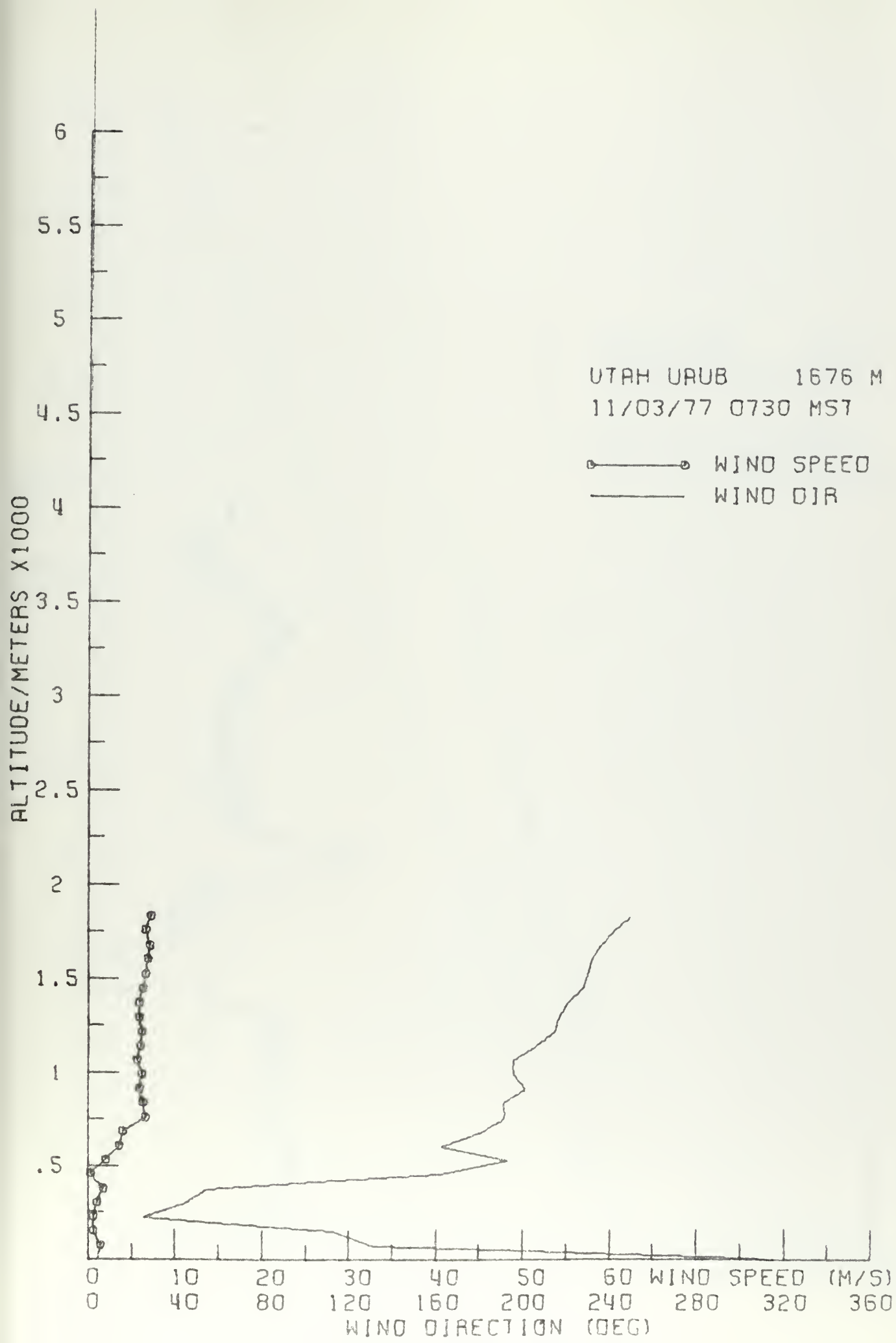
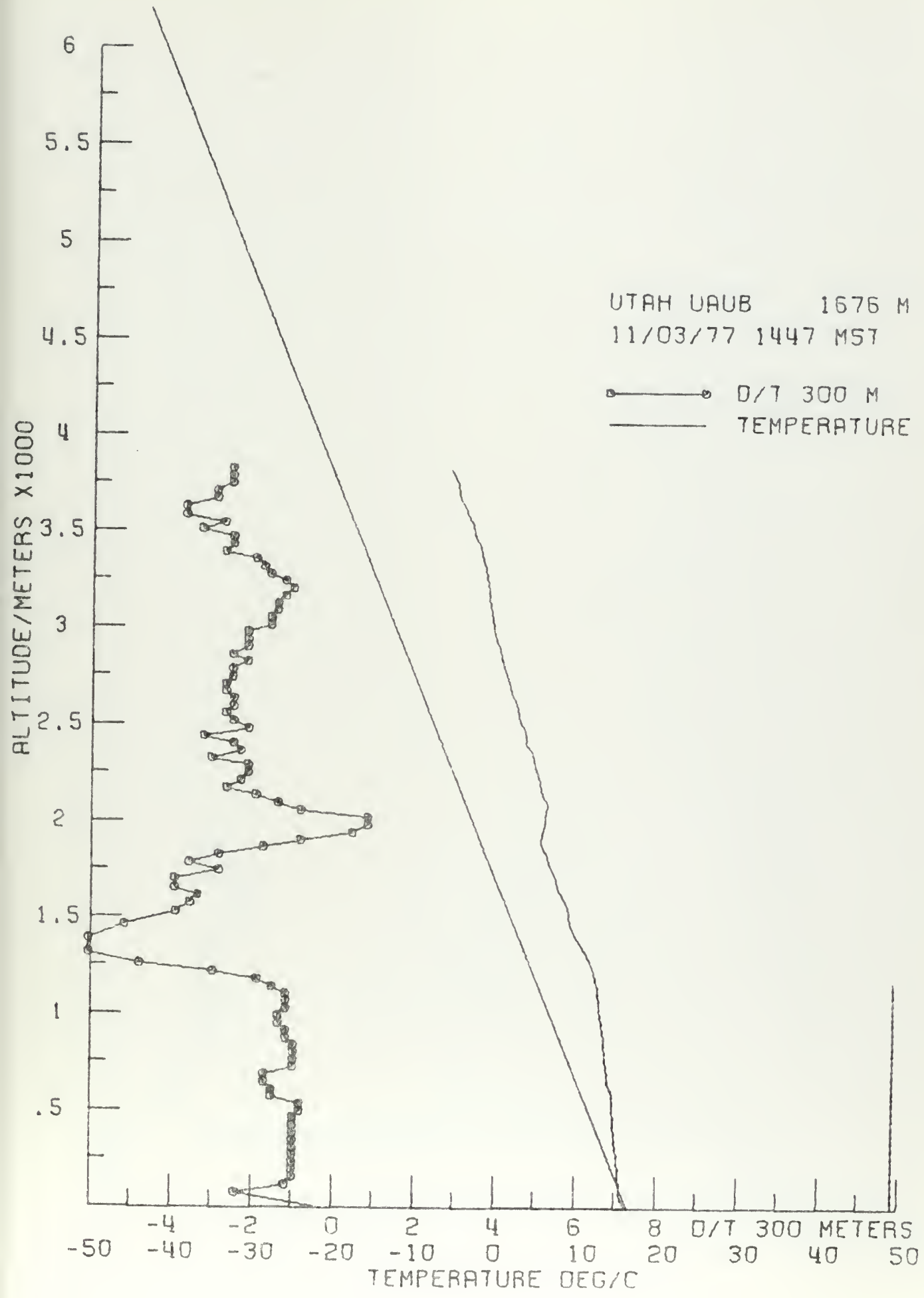
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/03/77 0730 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1676 M
11/03/77 1447 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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4.5
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3.5
3
2.5
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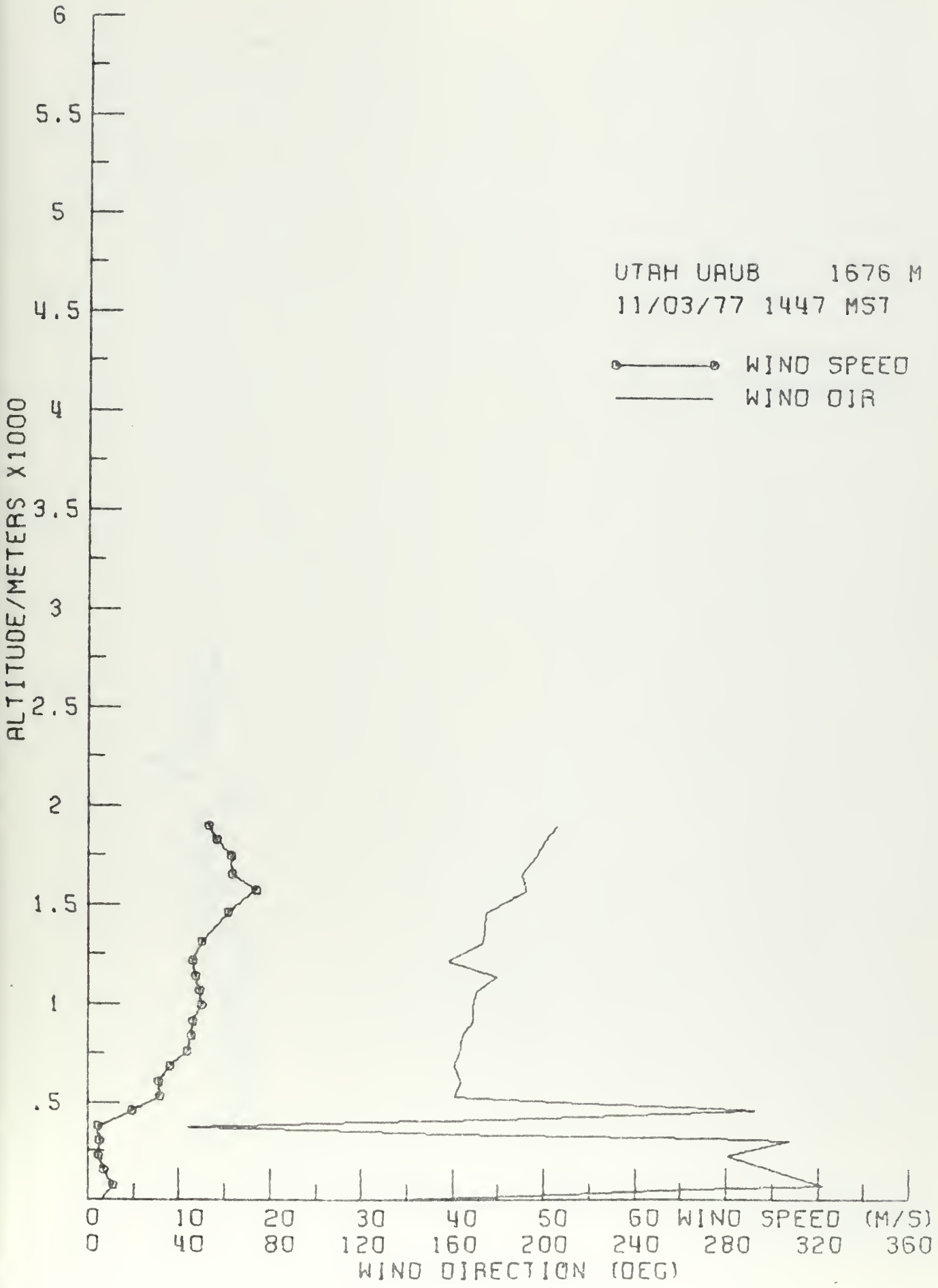
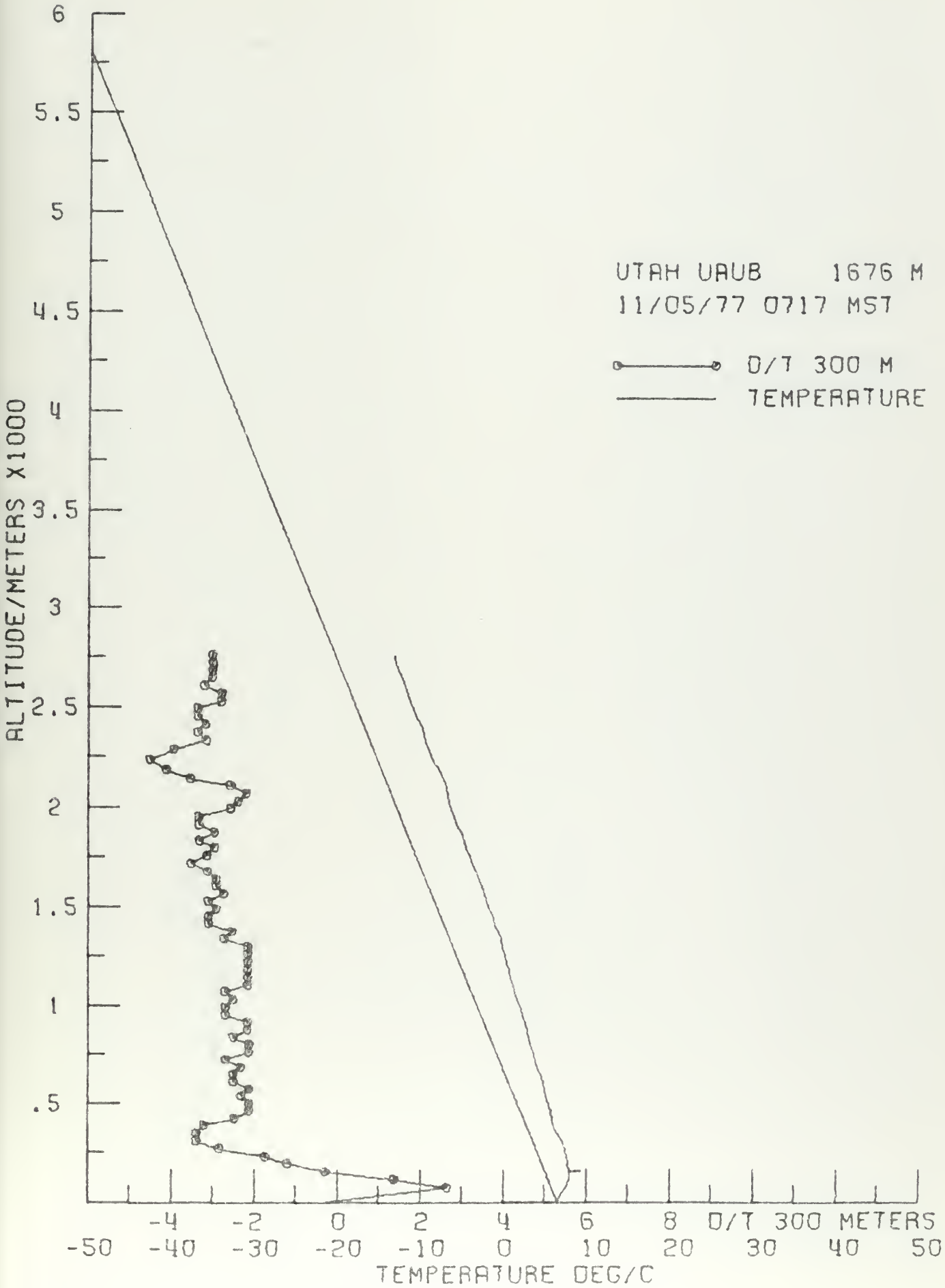
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/03/77 1447 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1676 M
11/05/77 0717 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5.5
5
4.5
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3.5
3
2.5
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1.5
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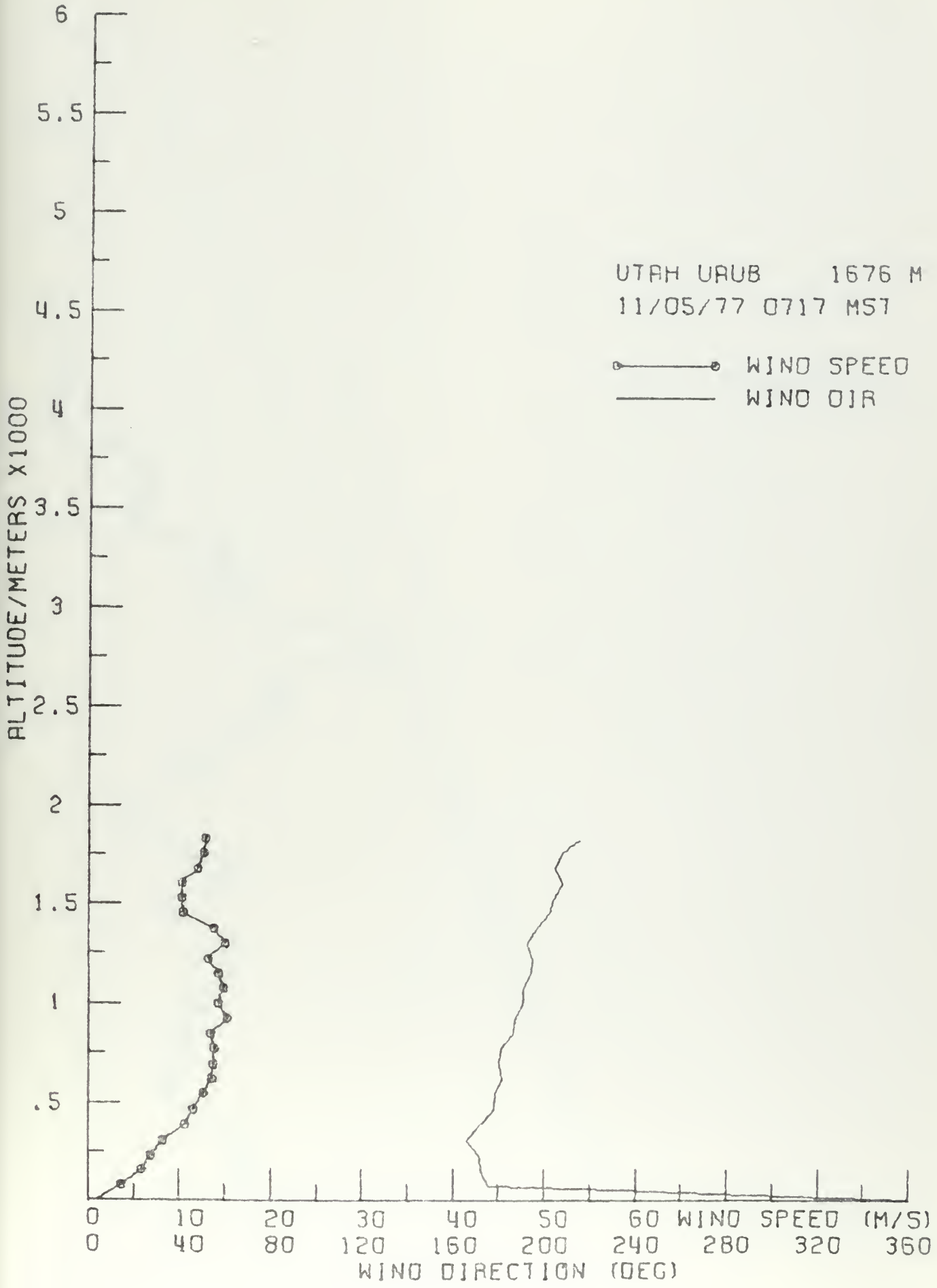
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/05/77 0717 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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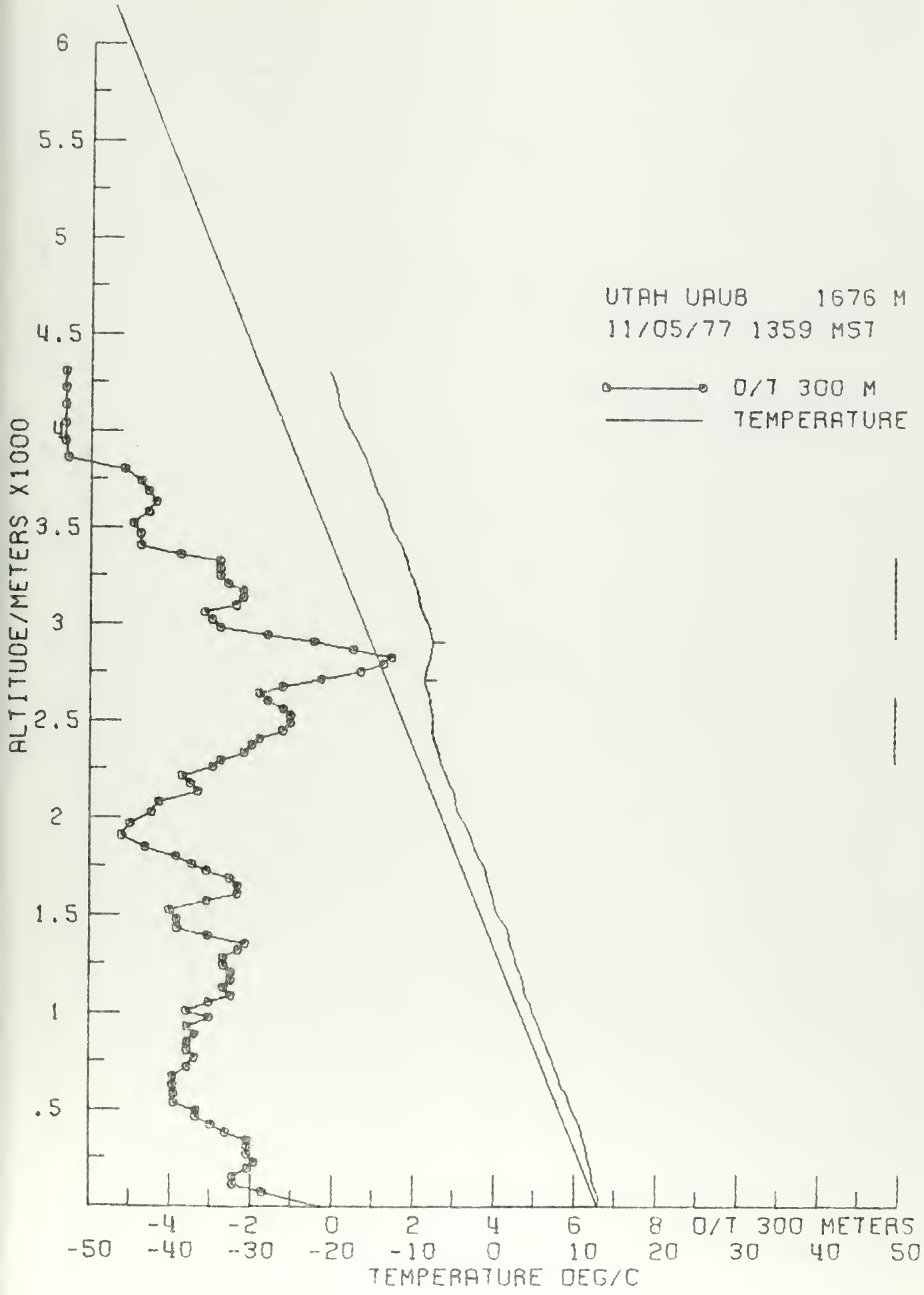
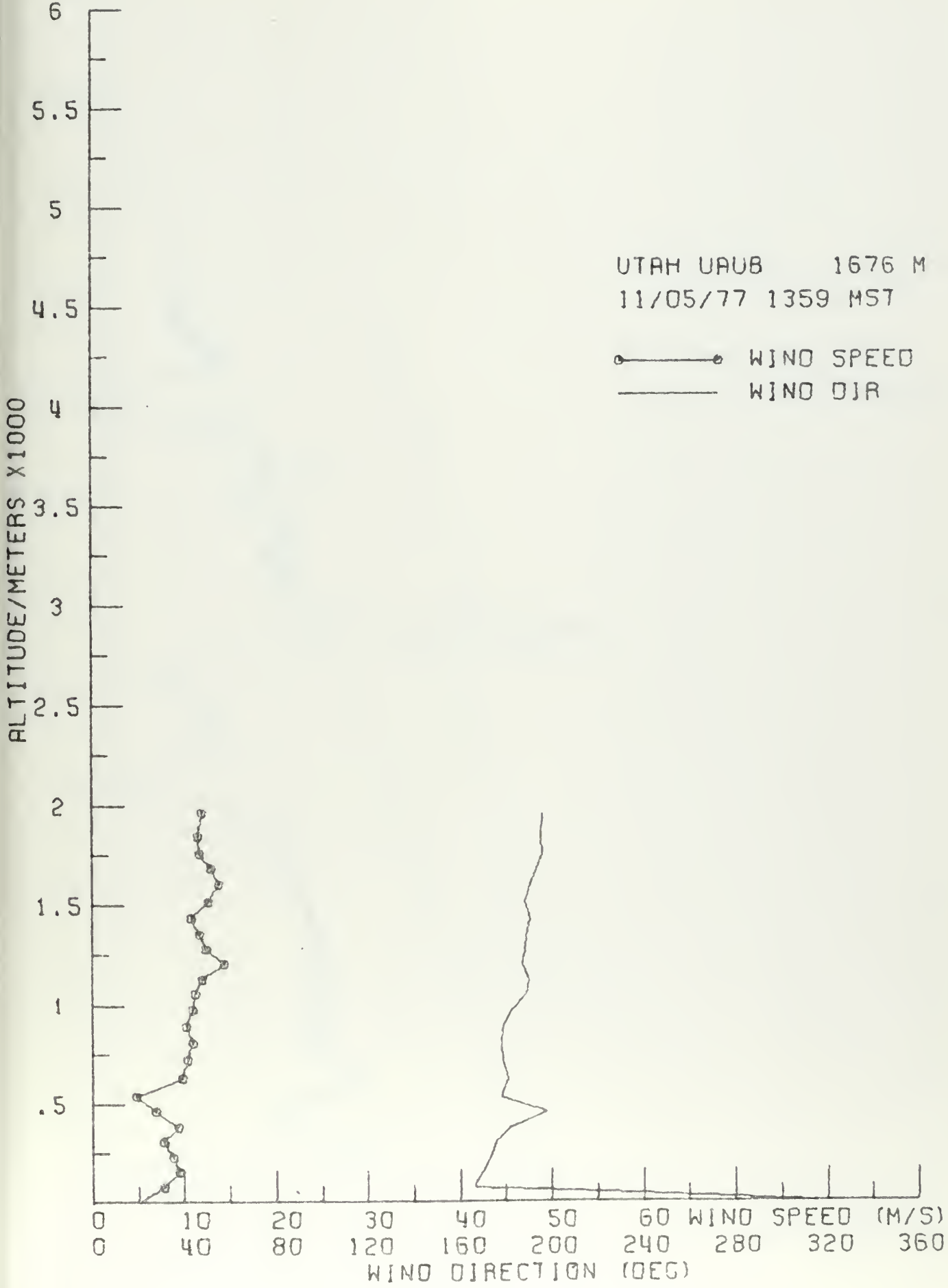
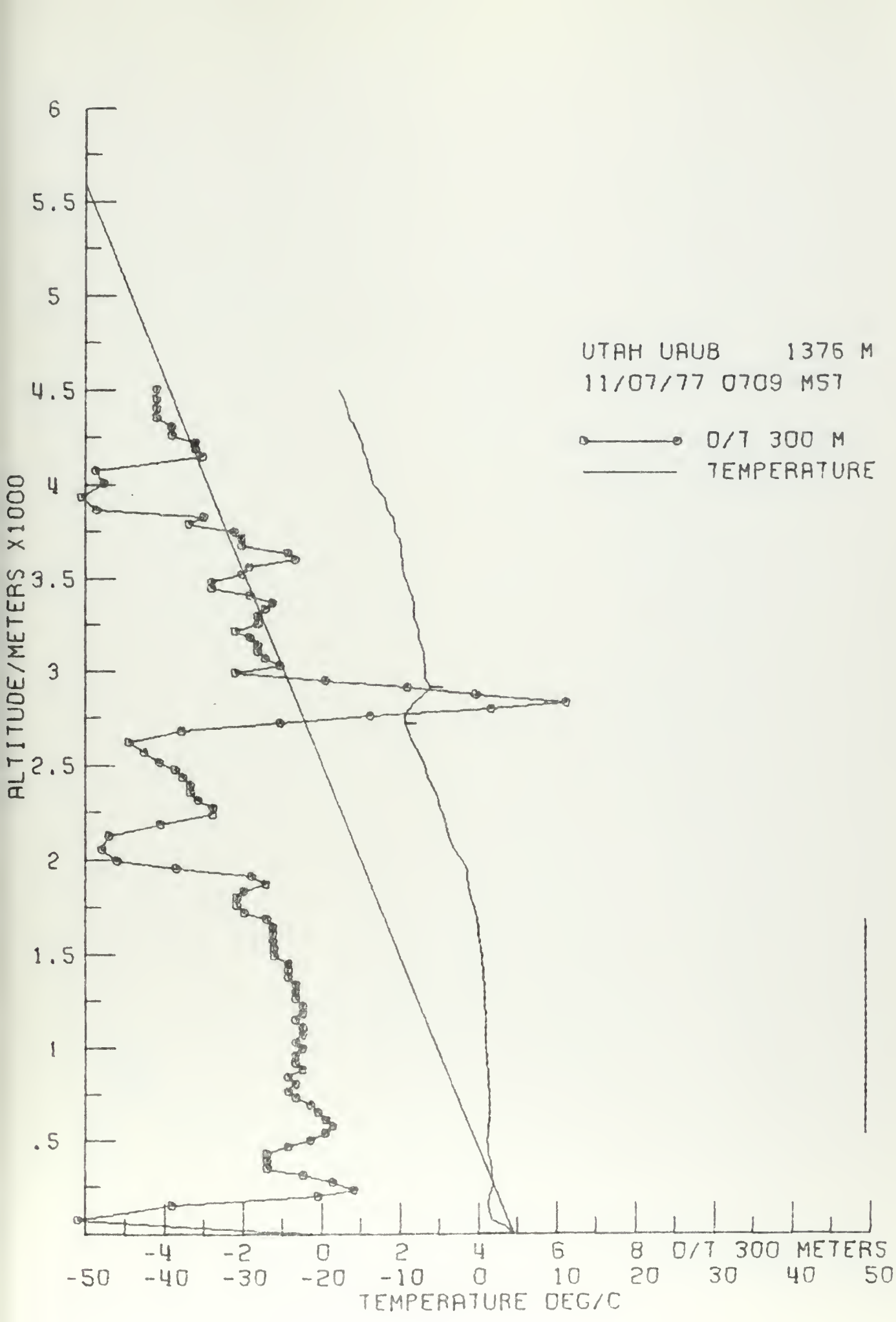
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1676 M
11/05/77 1359 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
O/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/05/77 1359 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1376 M
11/07/77 0709 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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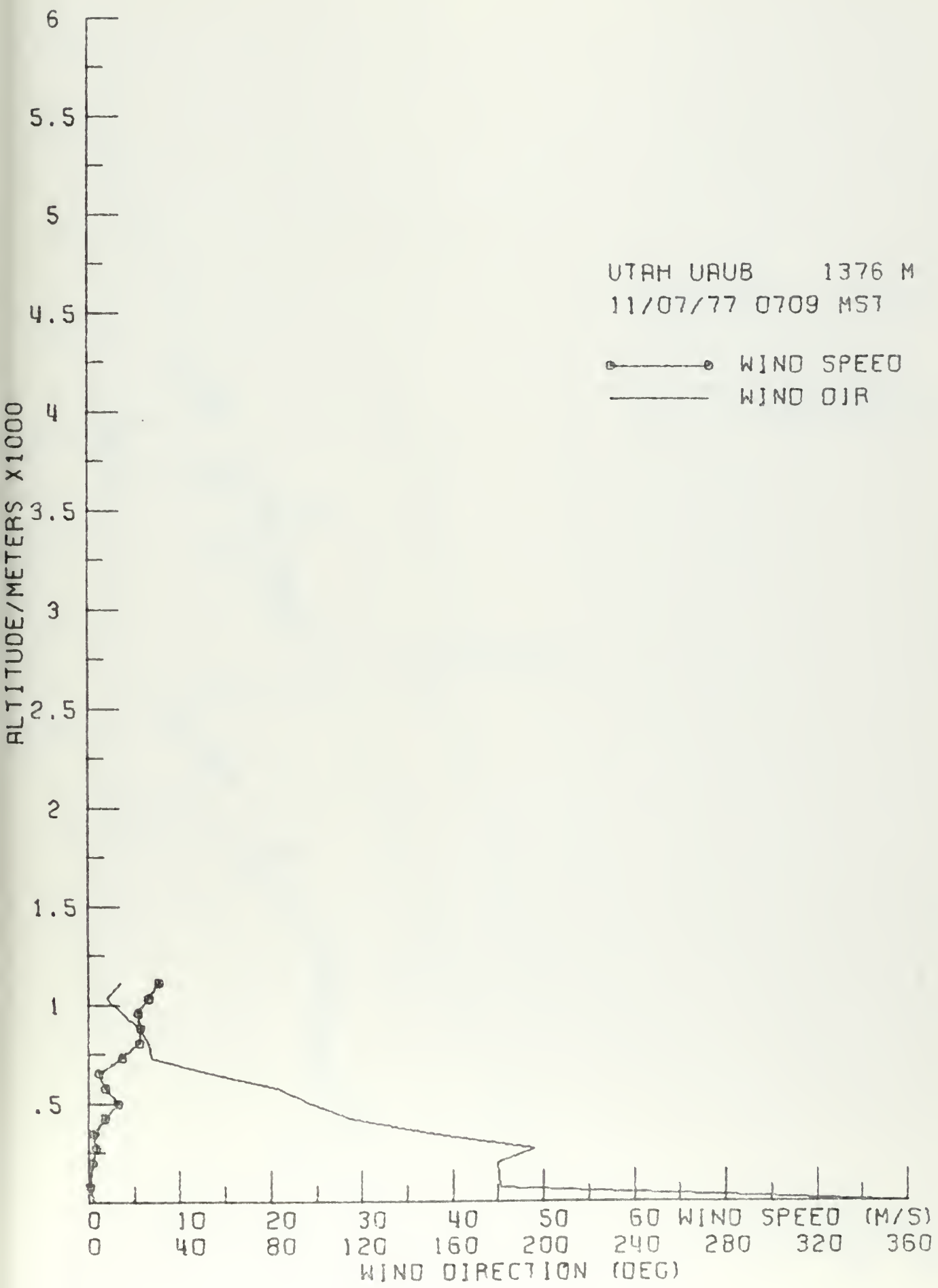
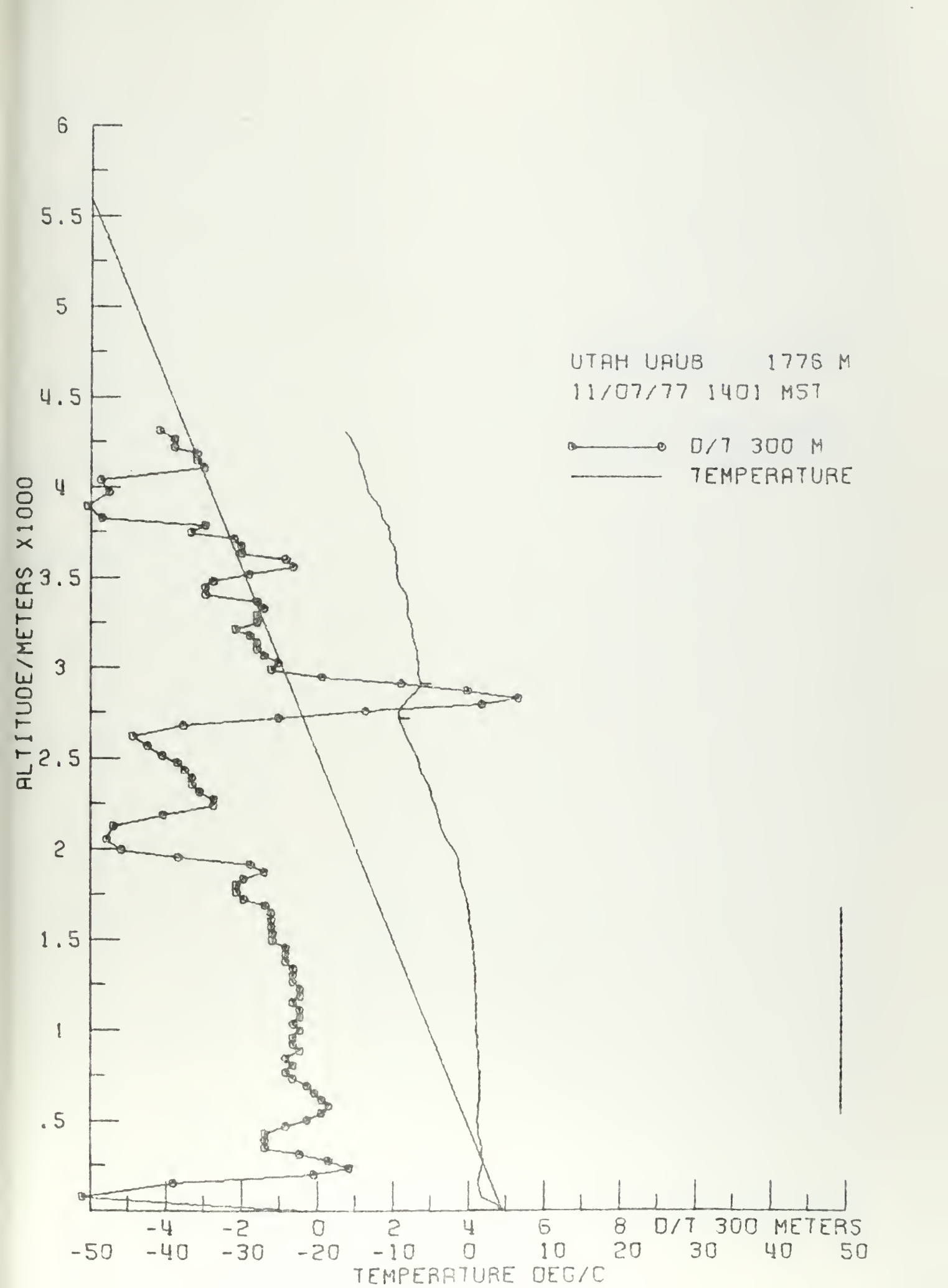
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
O/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


UTAH UAUB 1376 M
11/07/77 0709 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1776 M
11/07/77 1401 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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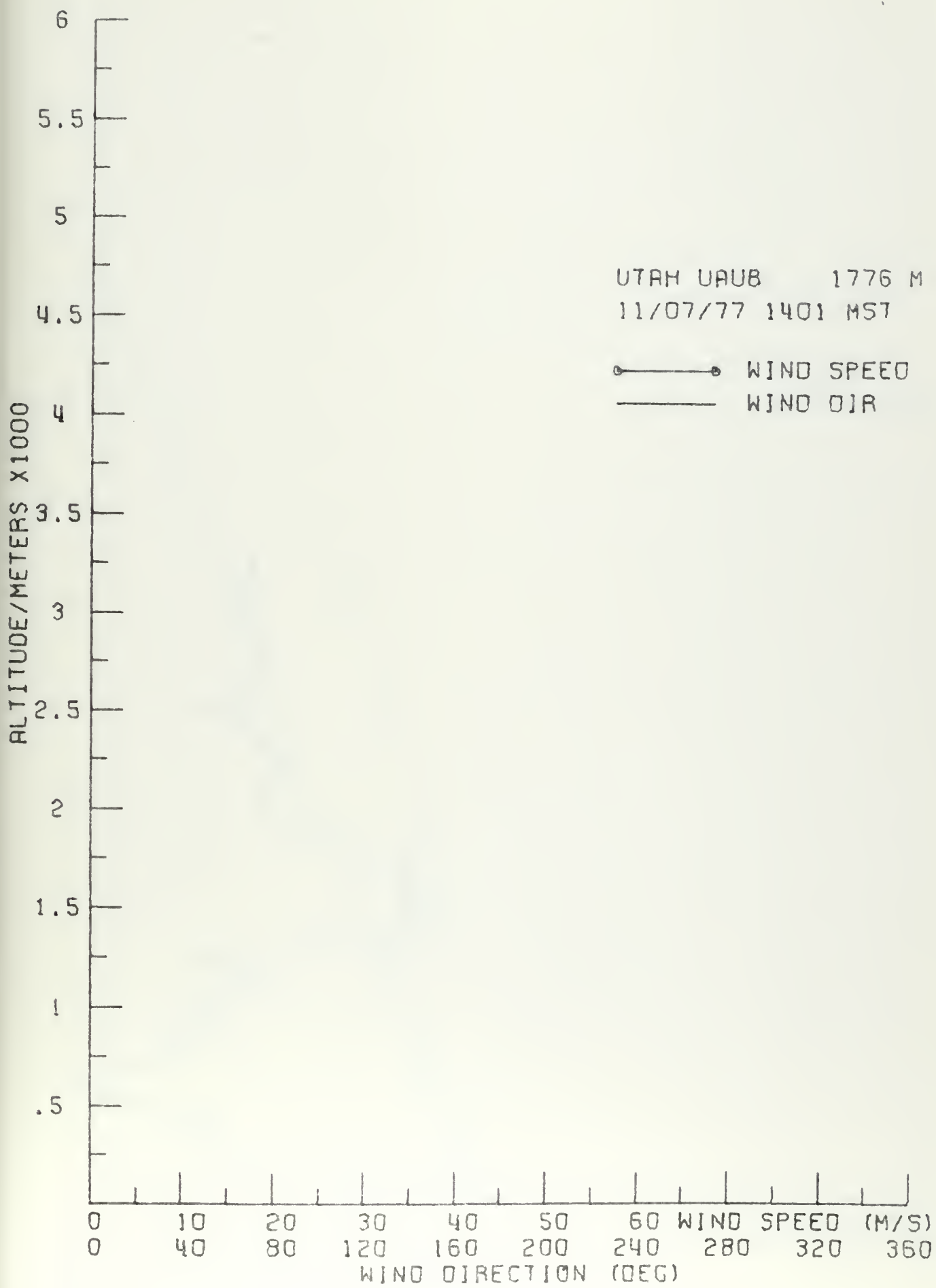
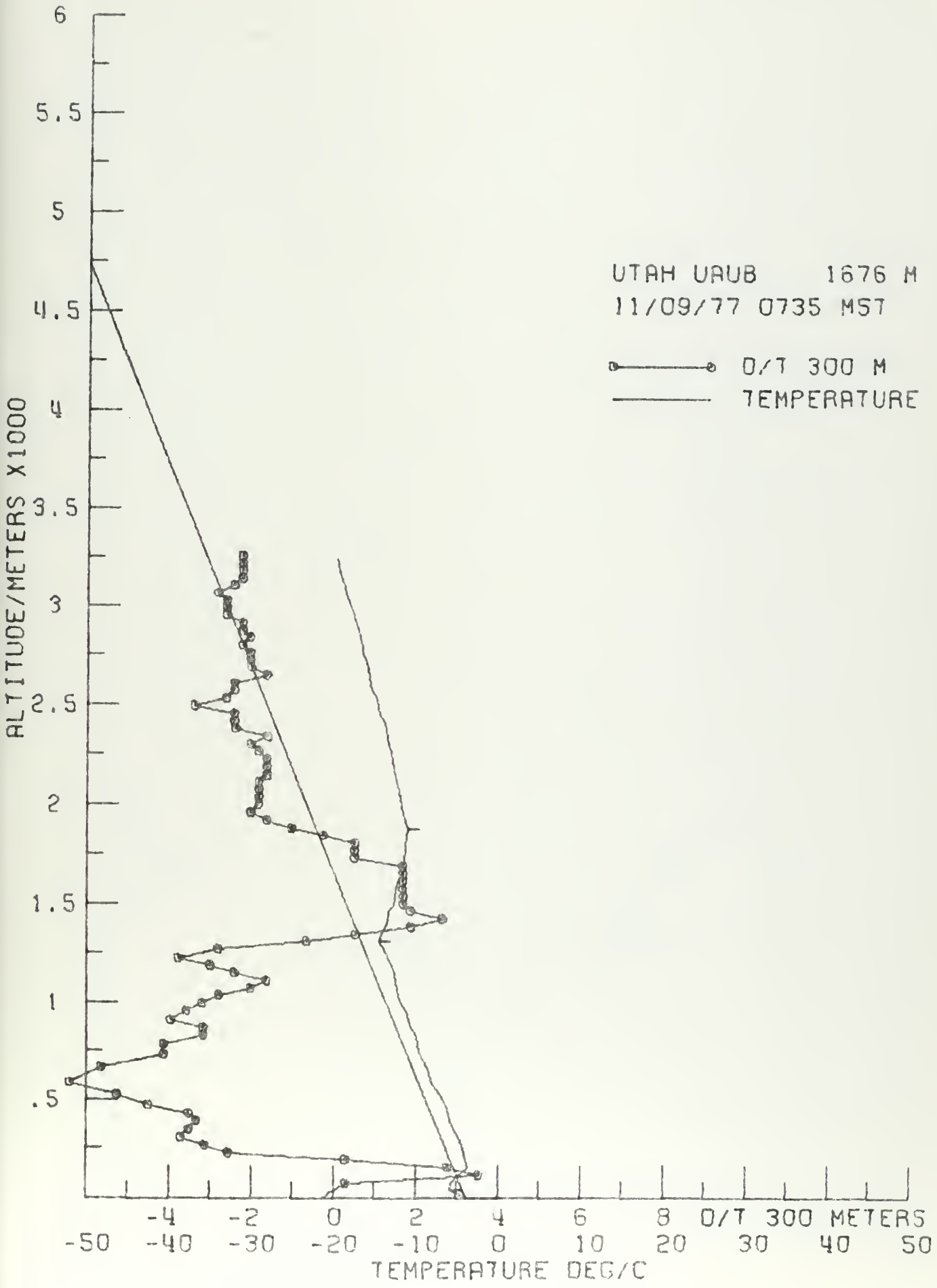
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1776 M
11/07/77 1401 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1676 M
11/09/77 0735 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5.5
5
4.5
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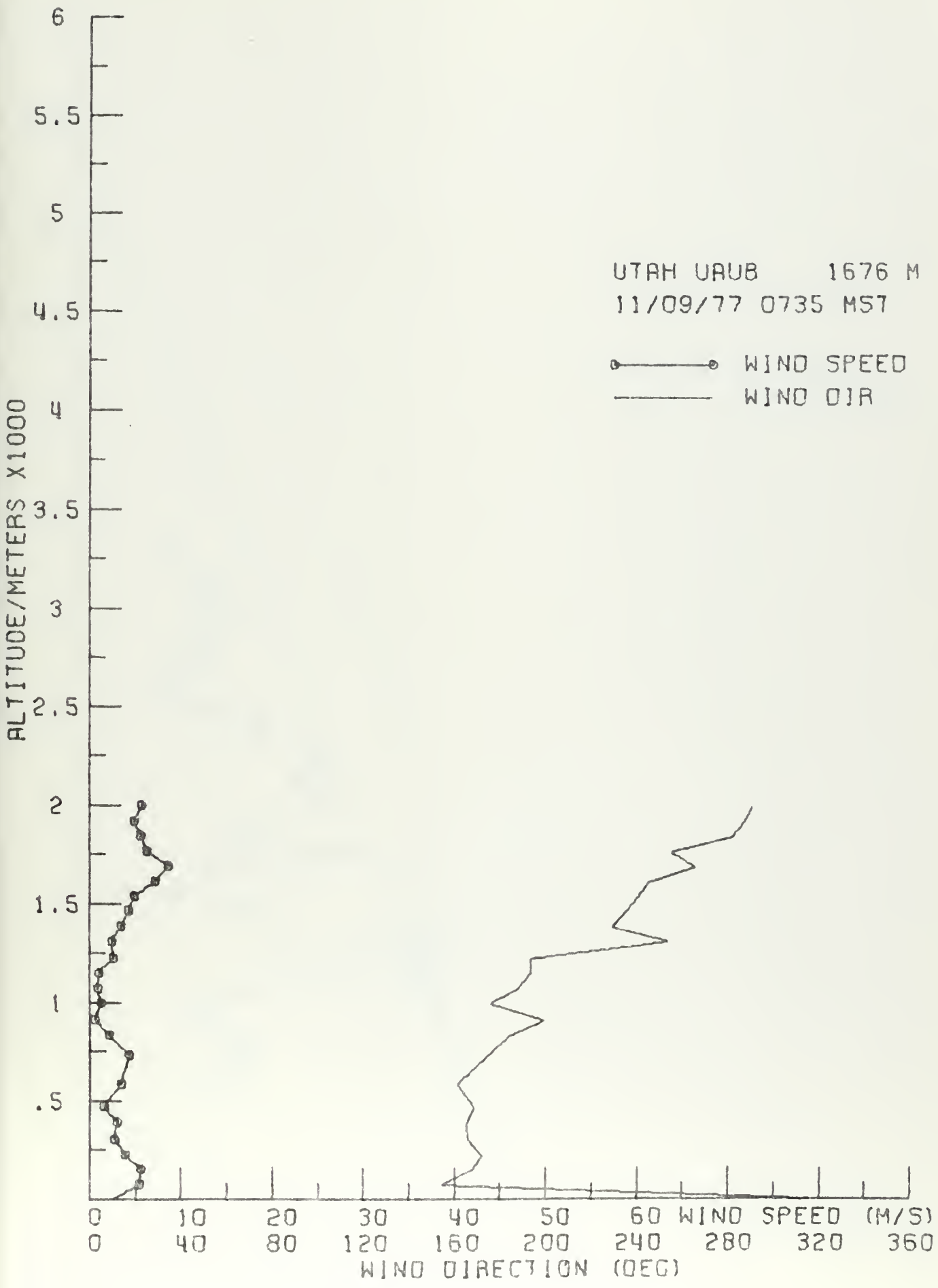
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/09/77 0735 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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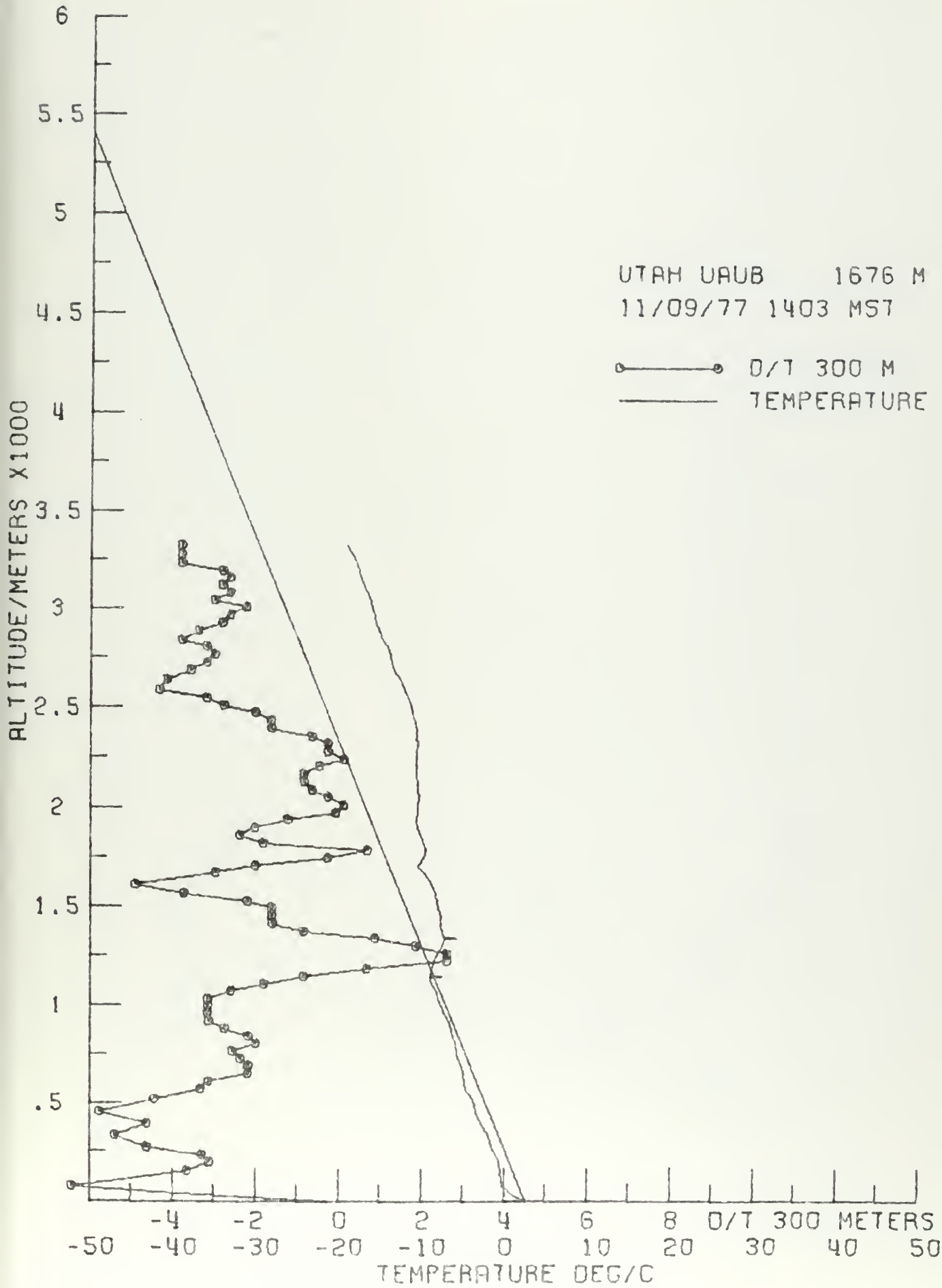
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1676 M
11/09/77 1403 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5.5
5
4.5
4
3.5
3
2.5
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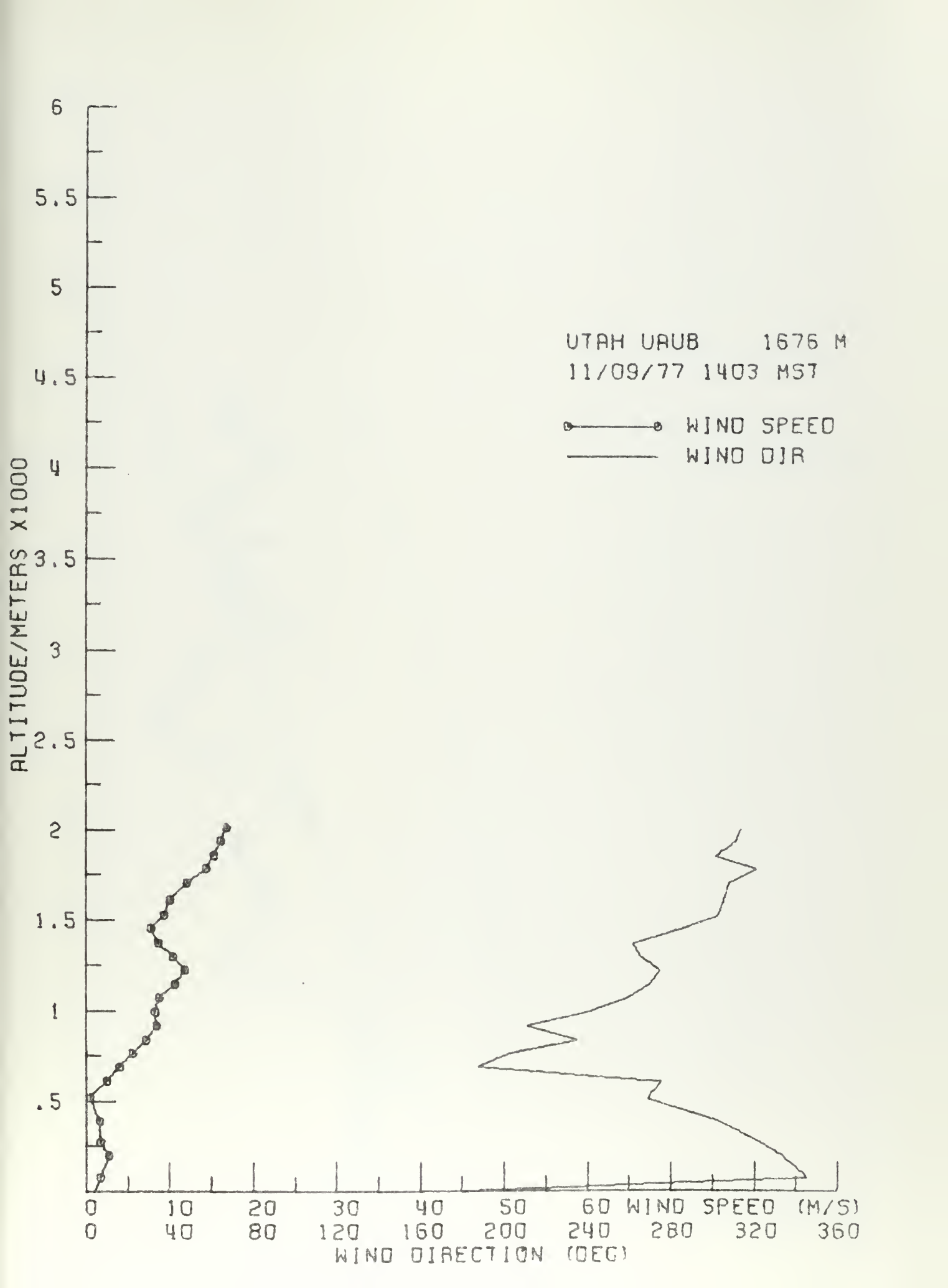
1.5
1
.5
-4 -2 0 2 4 6 8 O/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/09/77 1403 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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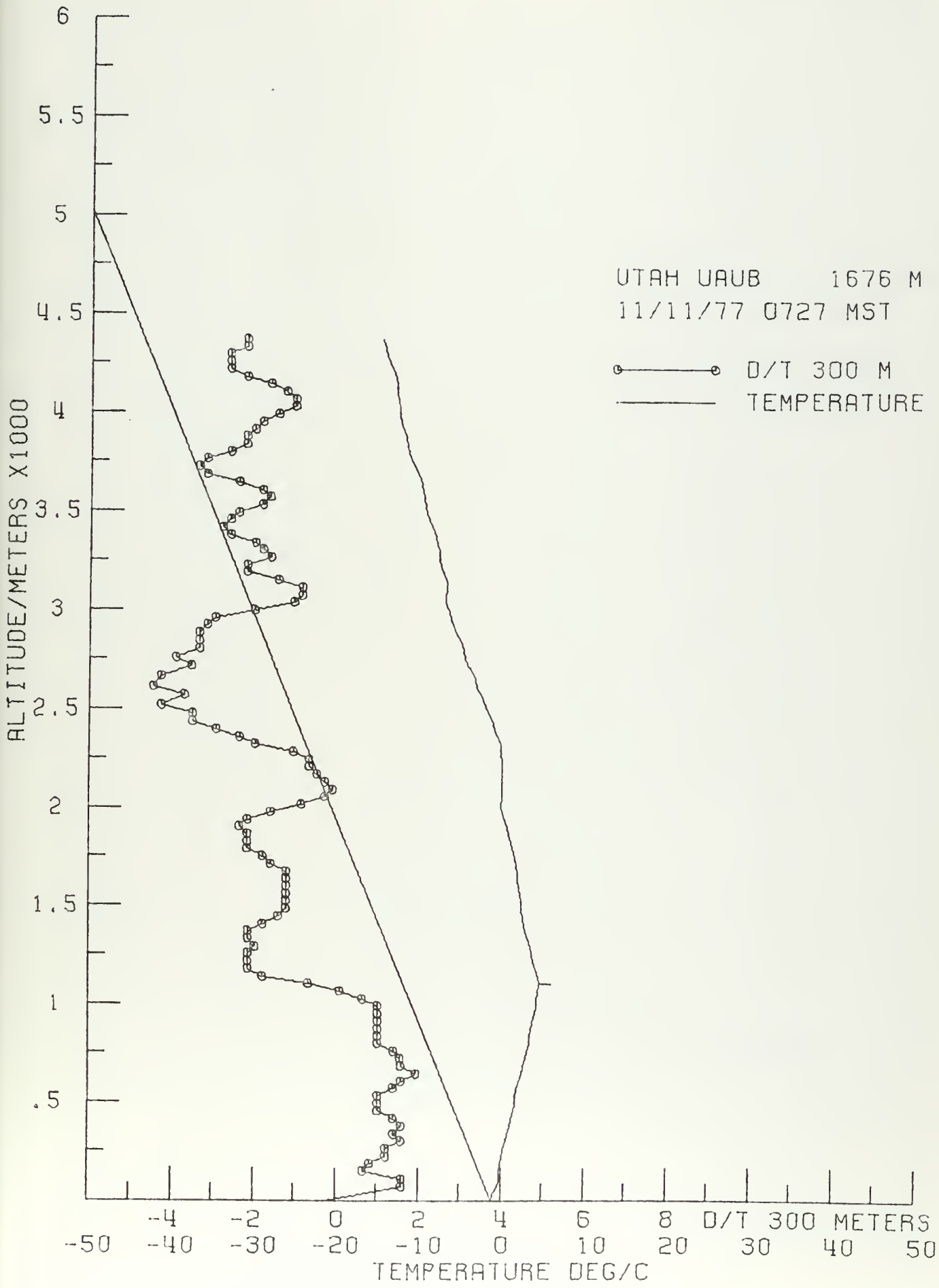
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1676 M
11/11/77 0727 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5.5
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4.5
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3.5
3
2.5
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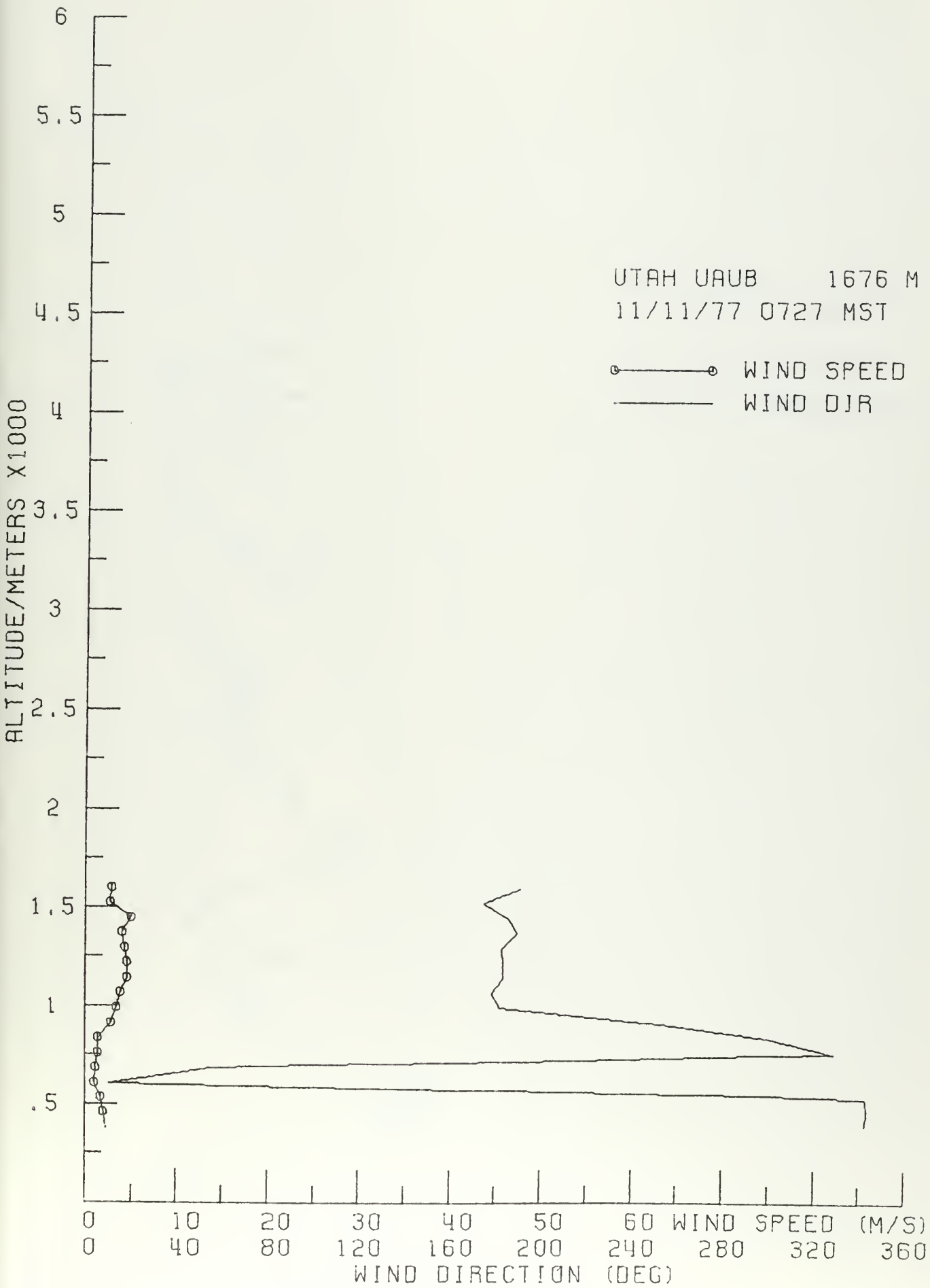
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/11/77 0727 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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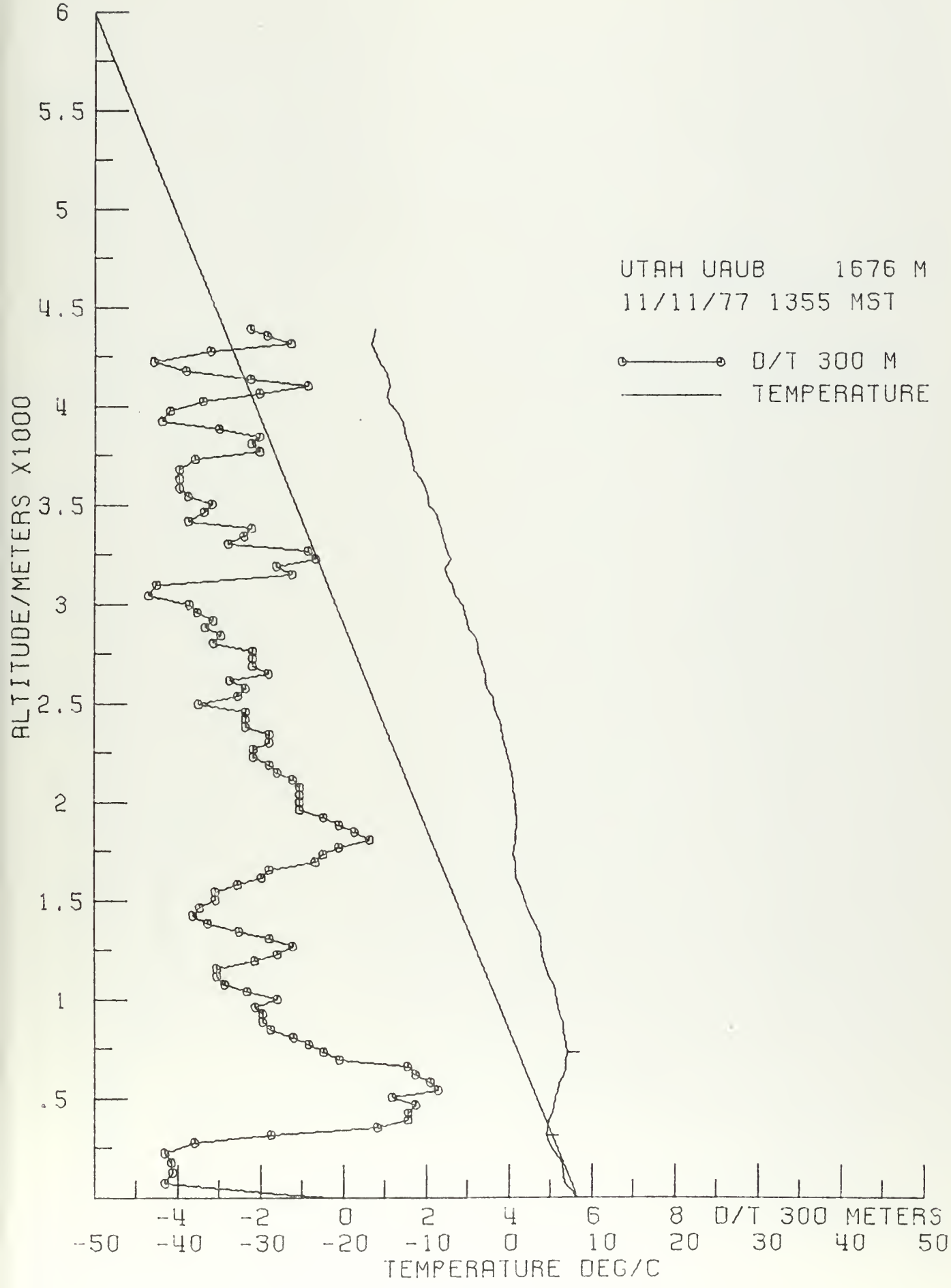
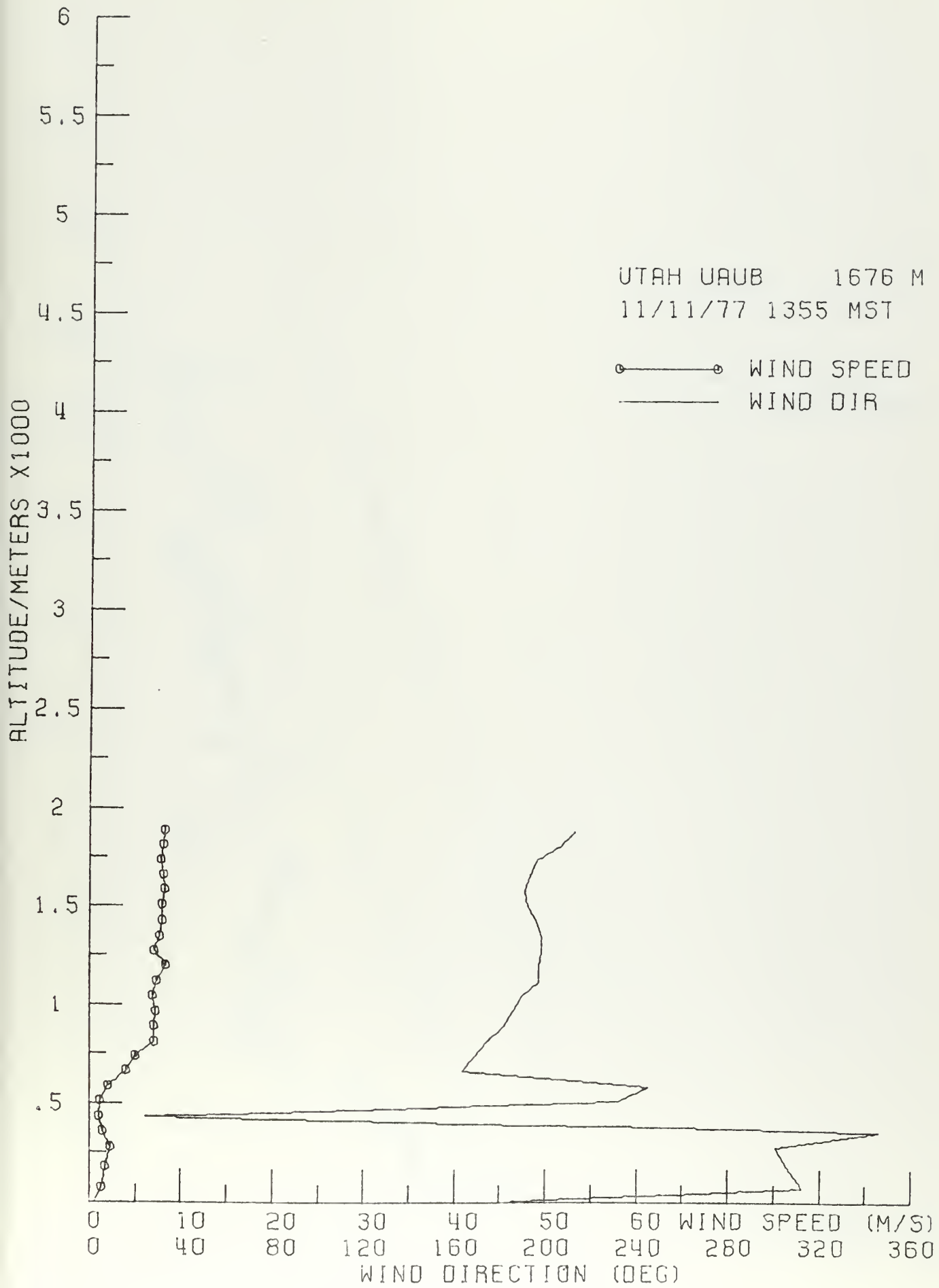
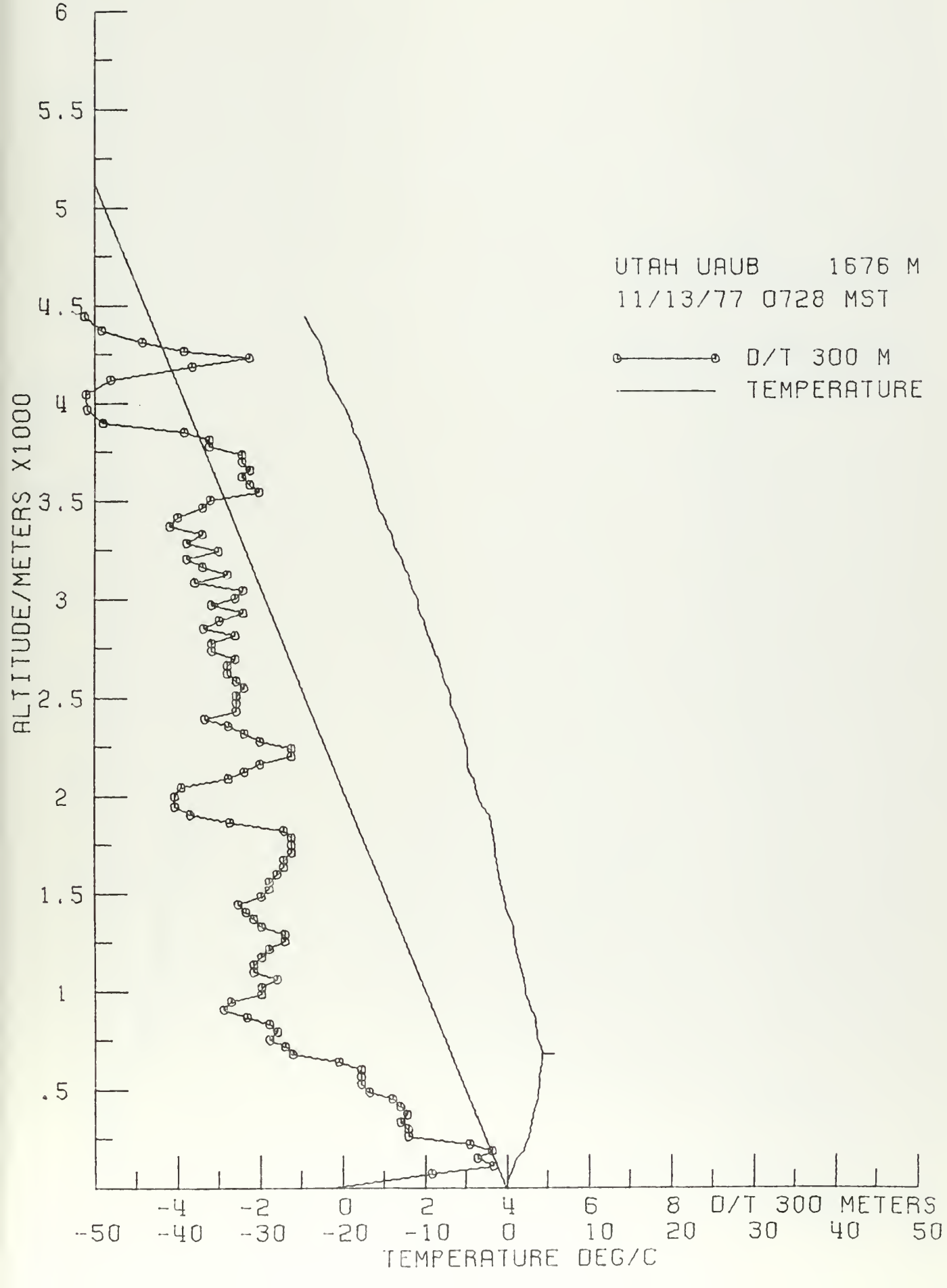
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1676 M
11/11/77 1355 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/11/77 1355 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1676 M
11/13/77 0728 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5.5
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4.5
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3.5
3
2.5
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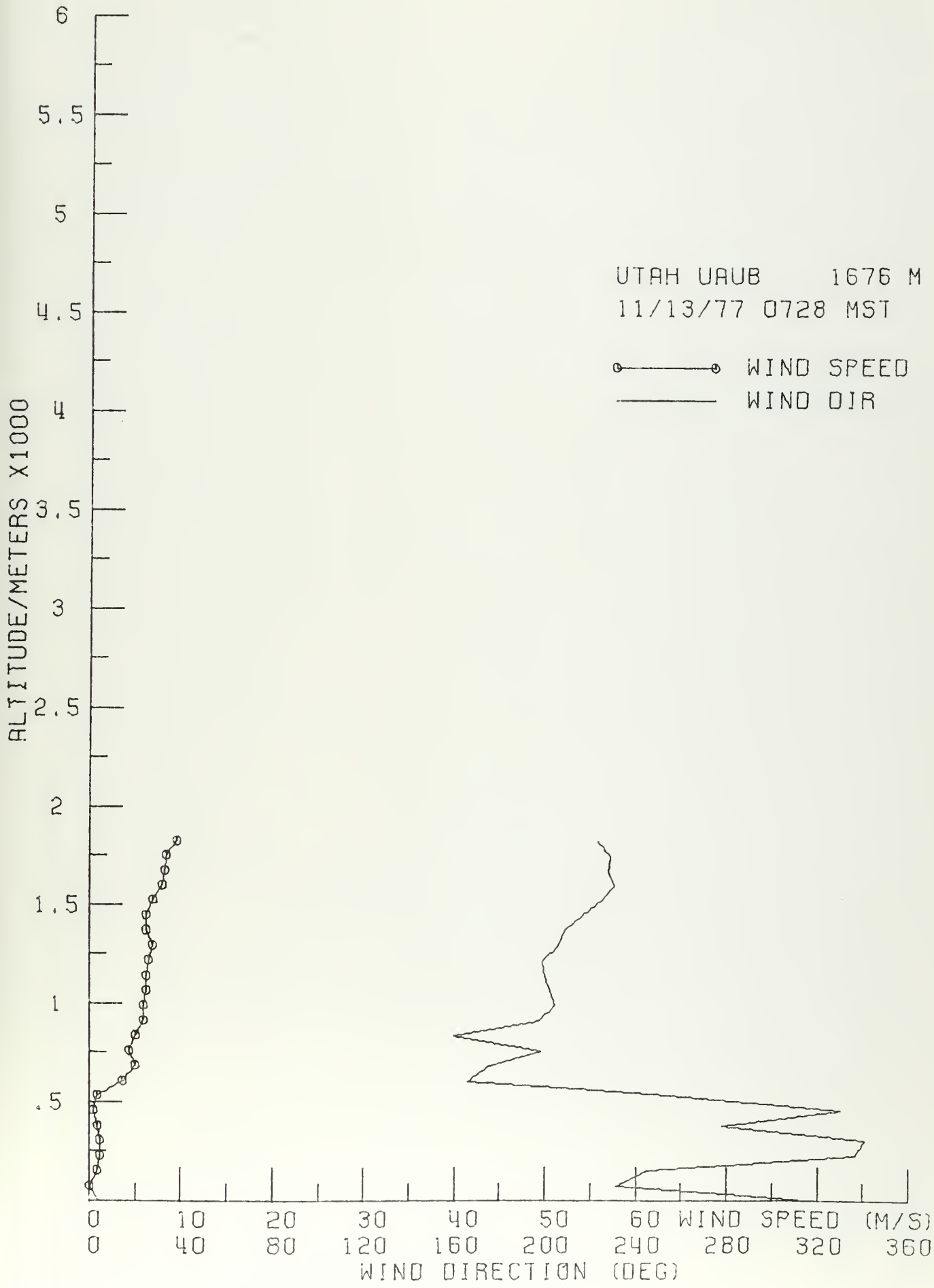
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/13/77 0728 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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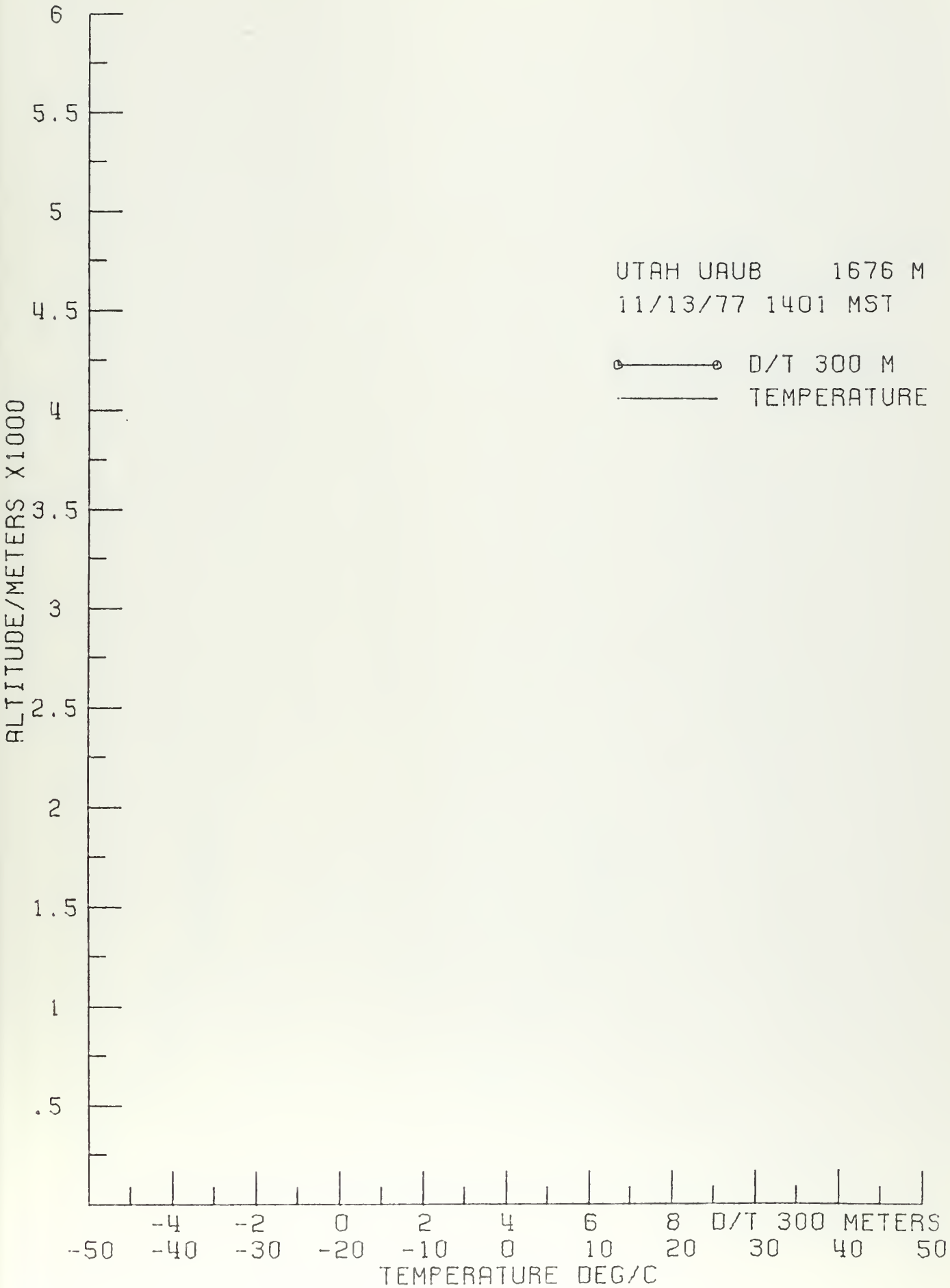
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1676 M
11/13/77 1401 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5.5
5
4.5
4
3.5
3
2.5
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1.5
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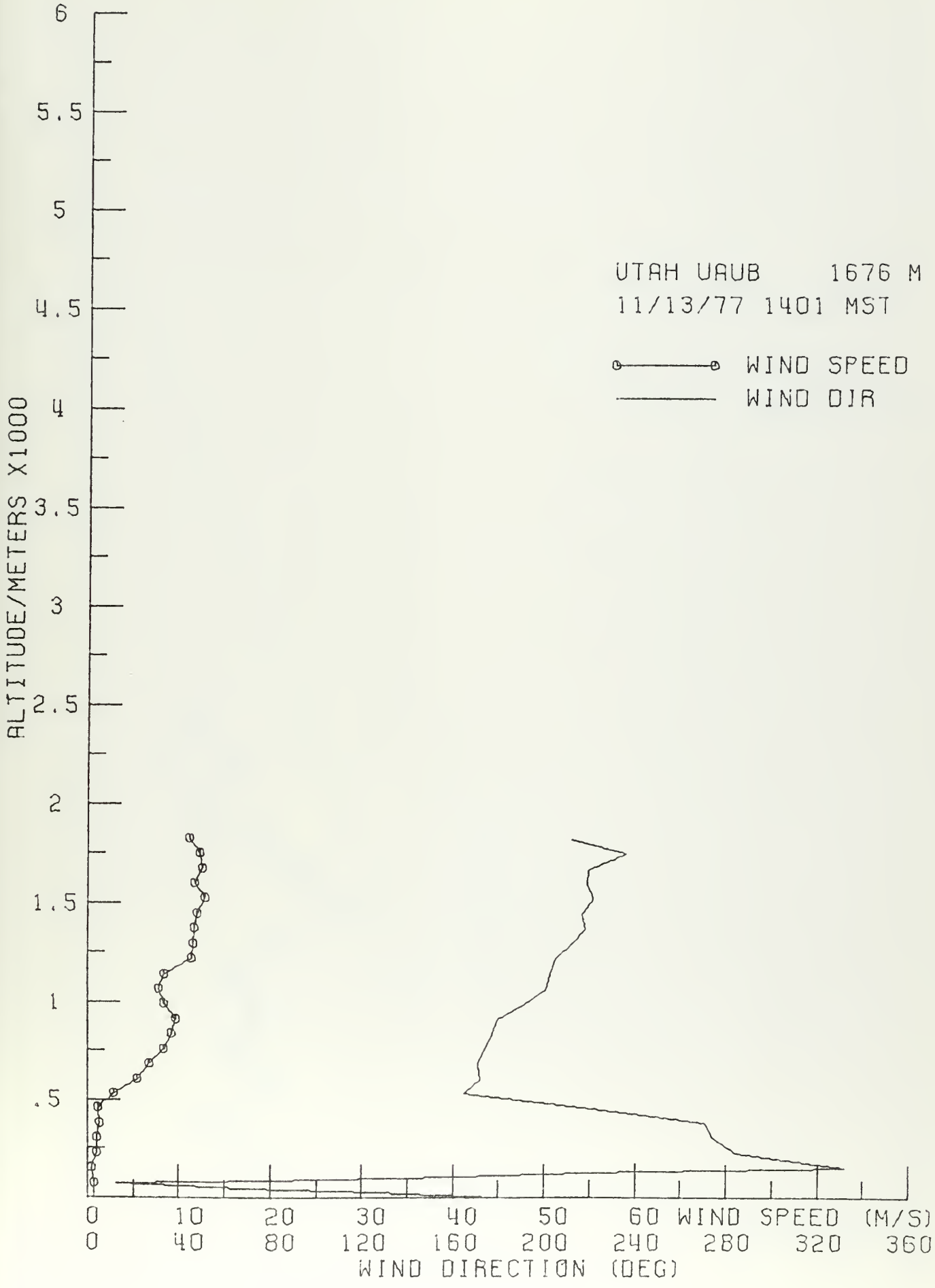
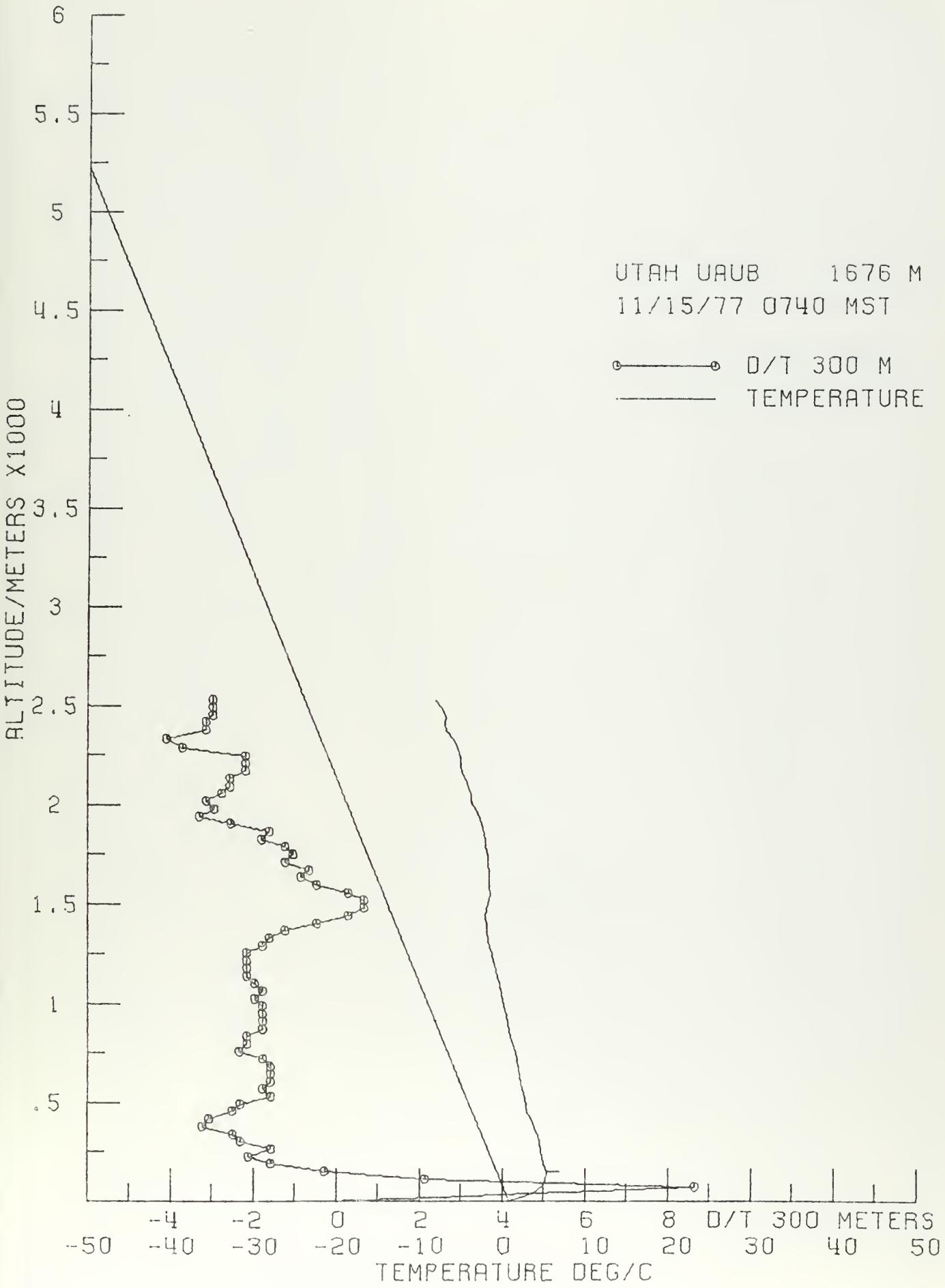
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/13/77 1401 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1676 M
11/15/77 0740 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5.5
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4.5
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3.5
3
2.5
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1.5
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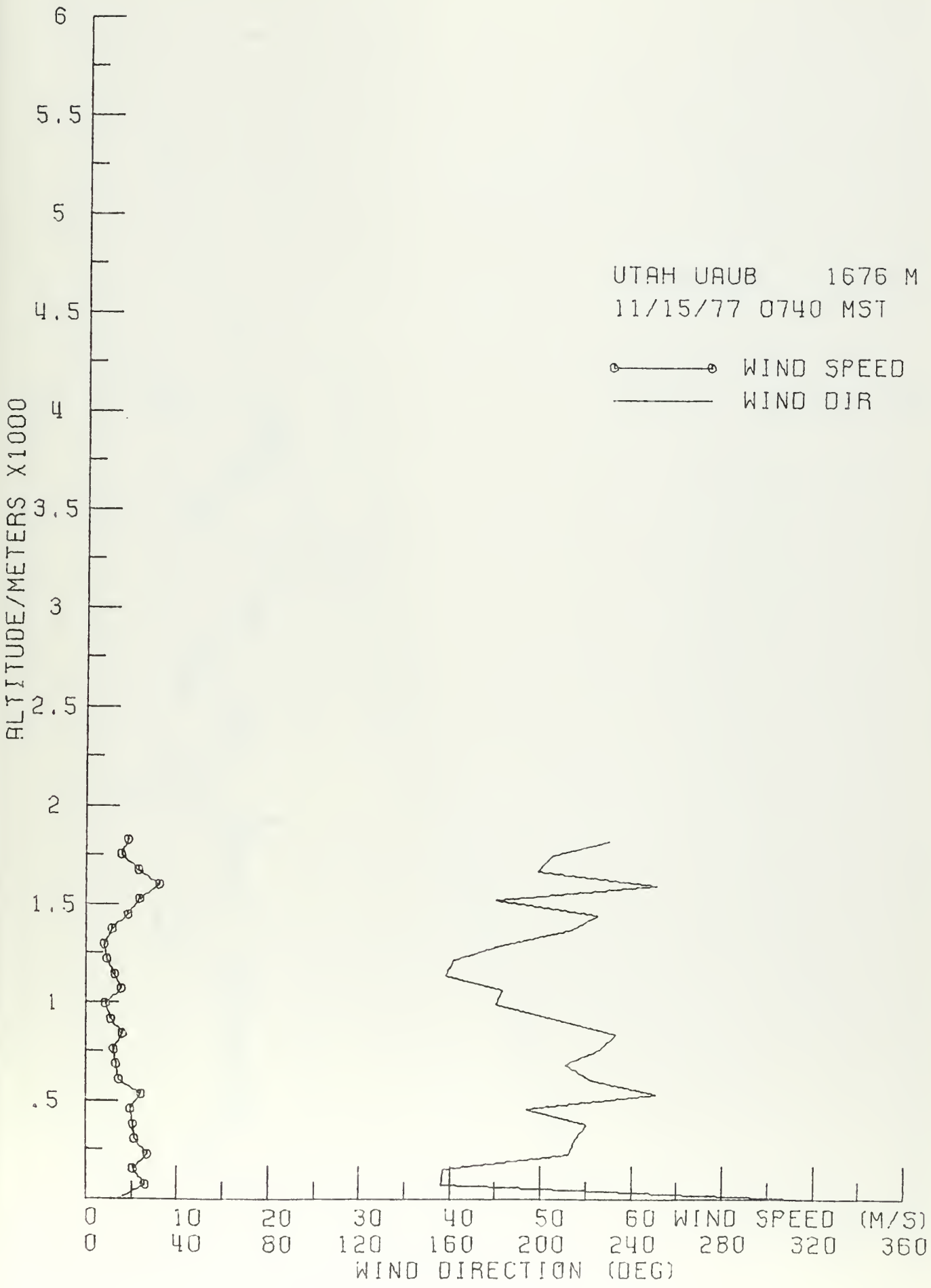
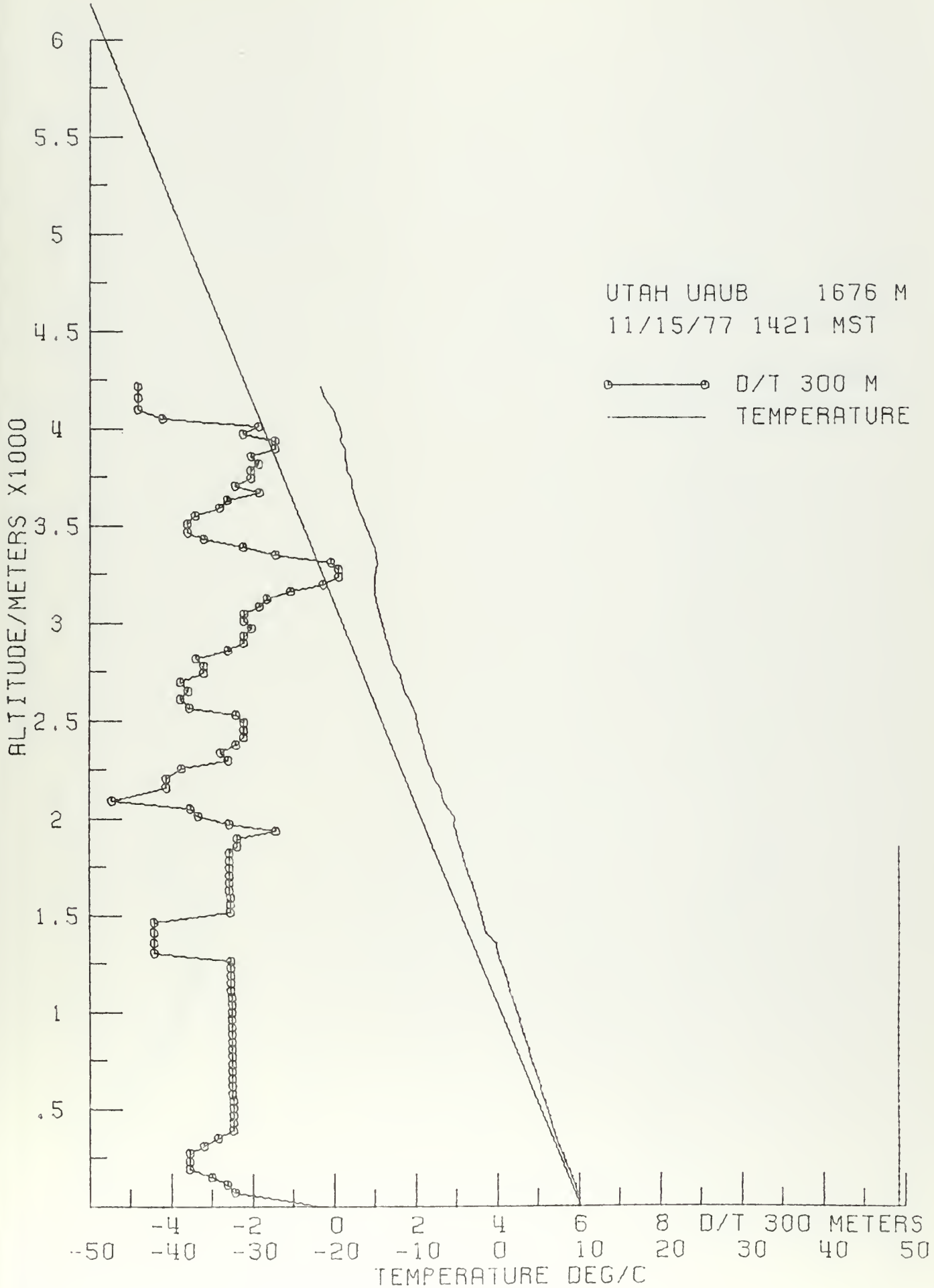
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/15/77 0740 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1676 M
11/15/77 1421 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5.5
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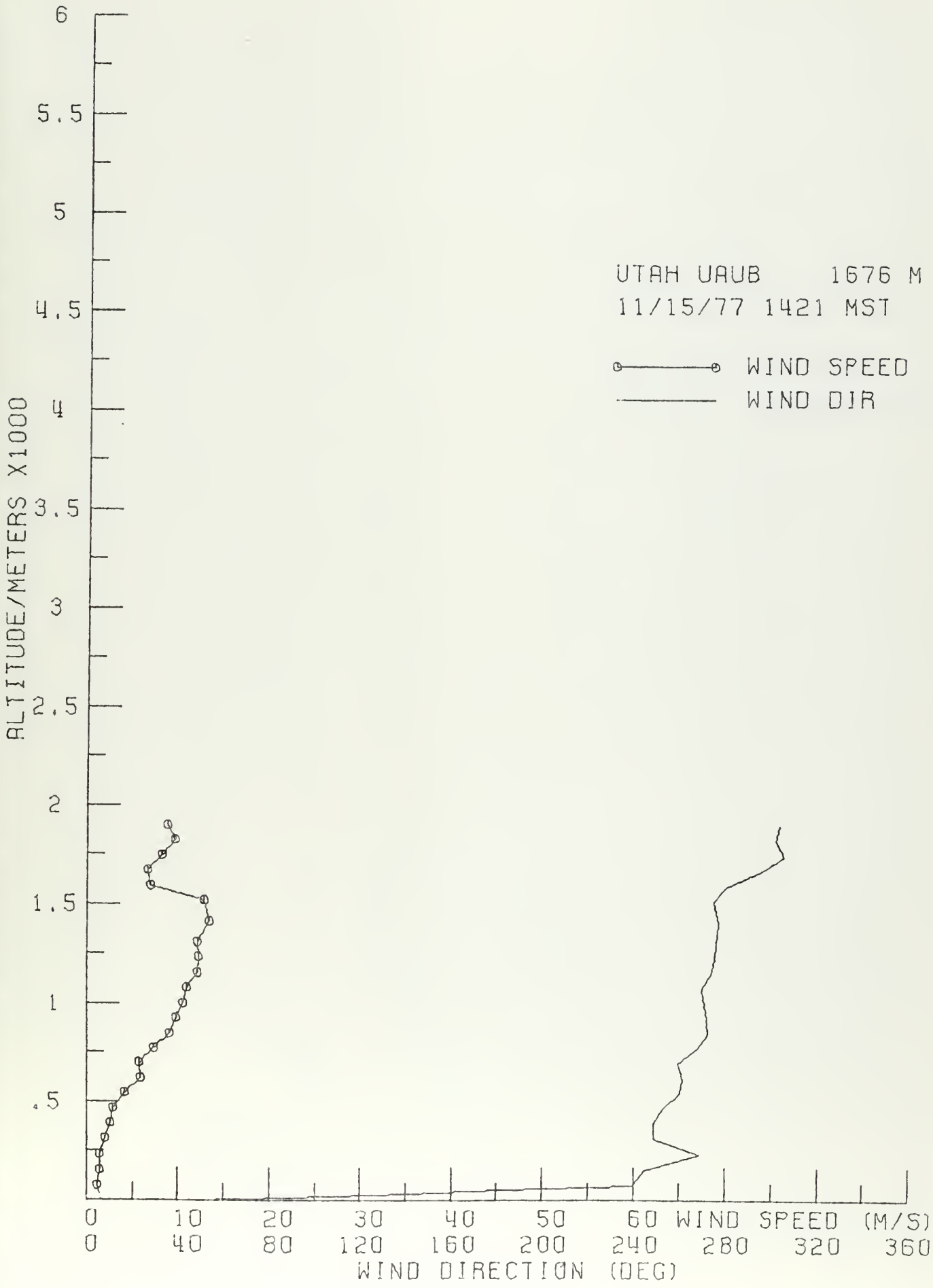
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/15/77 1421 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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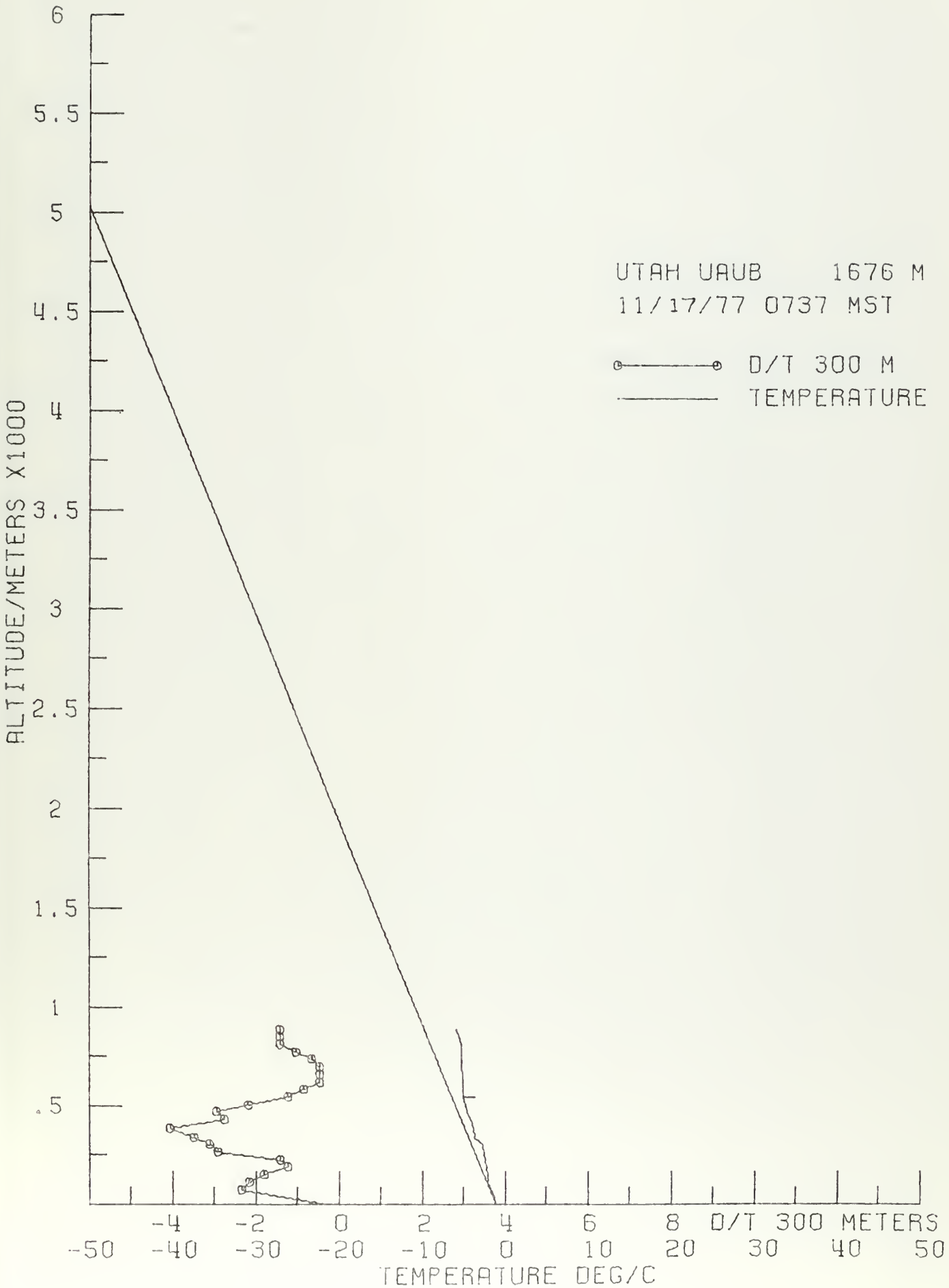
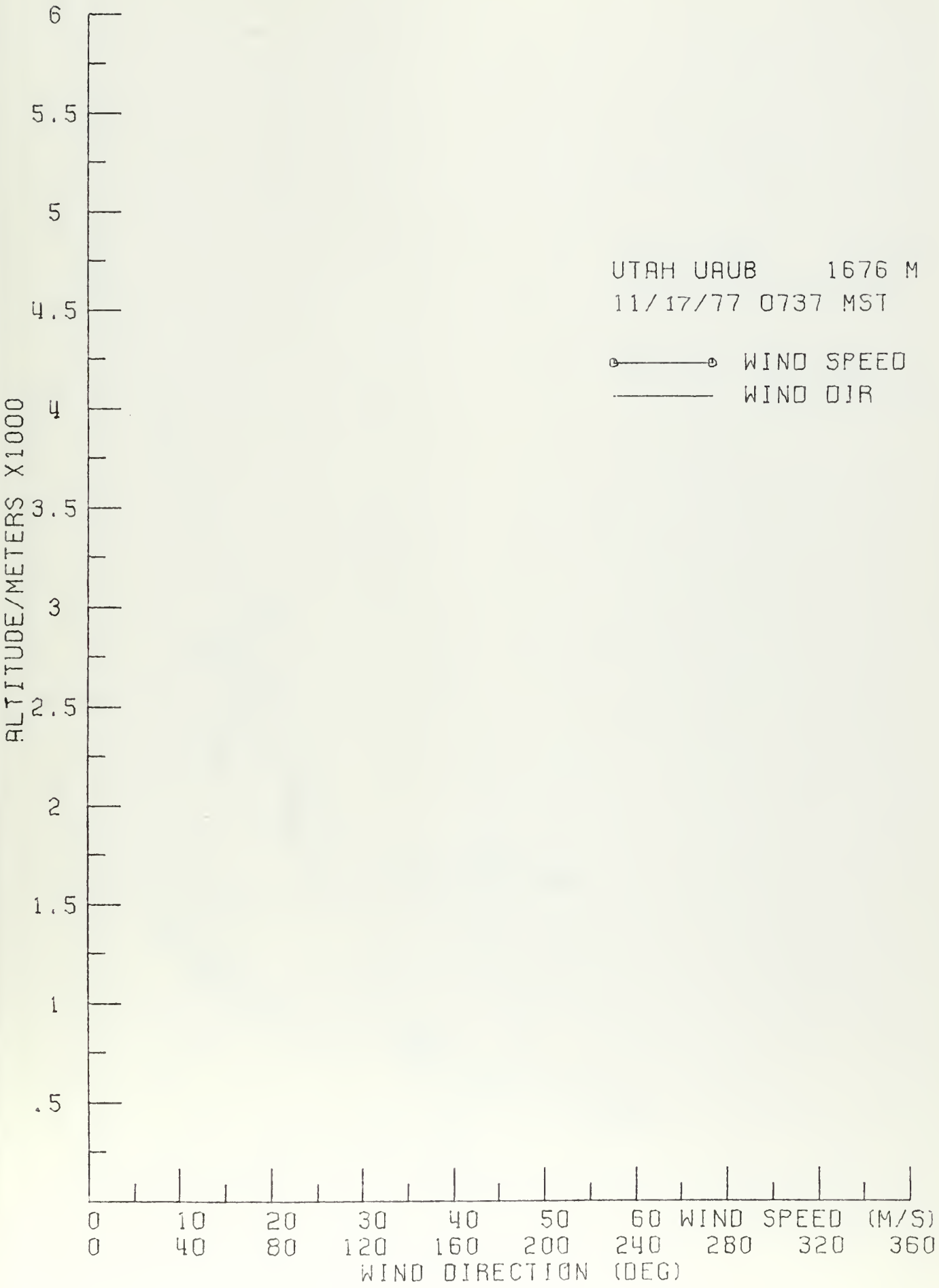
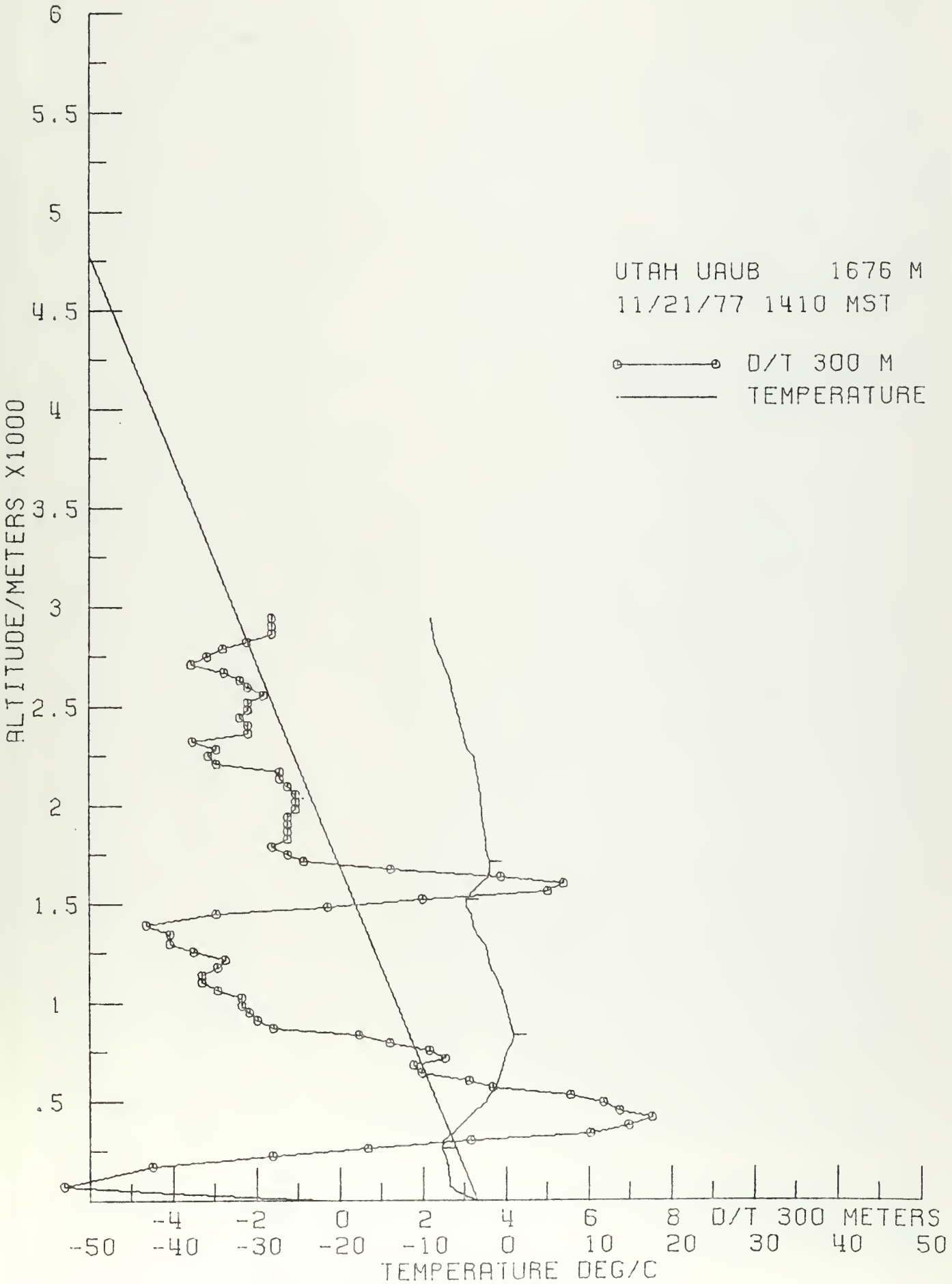
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1676 M
11/17/77 0737 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/17/77 0737 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1676 M
11/21/77 1410 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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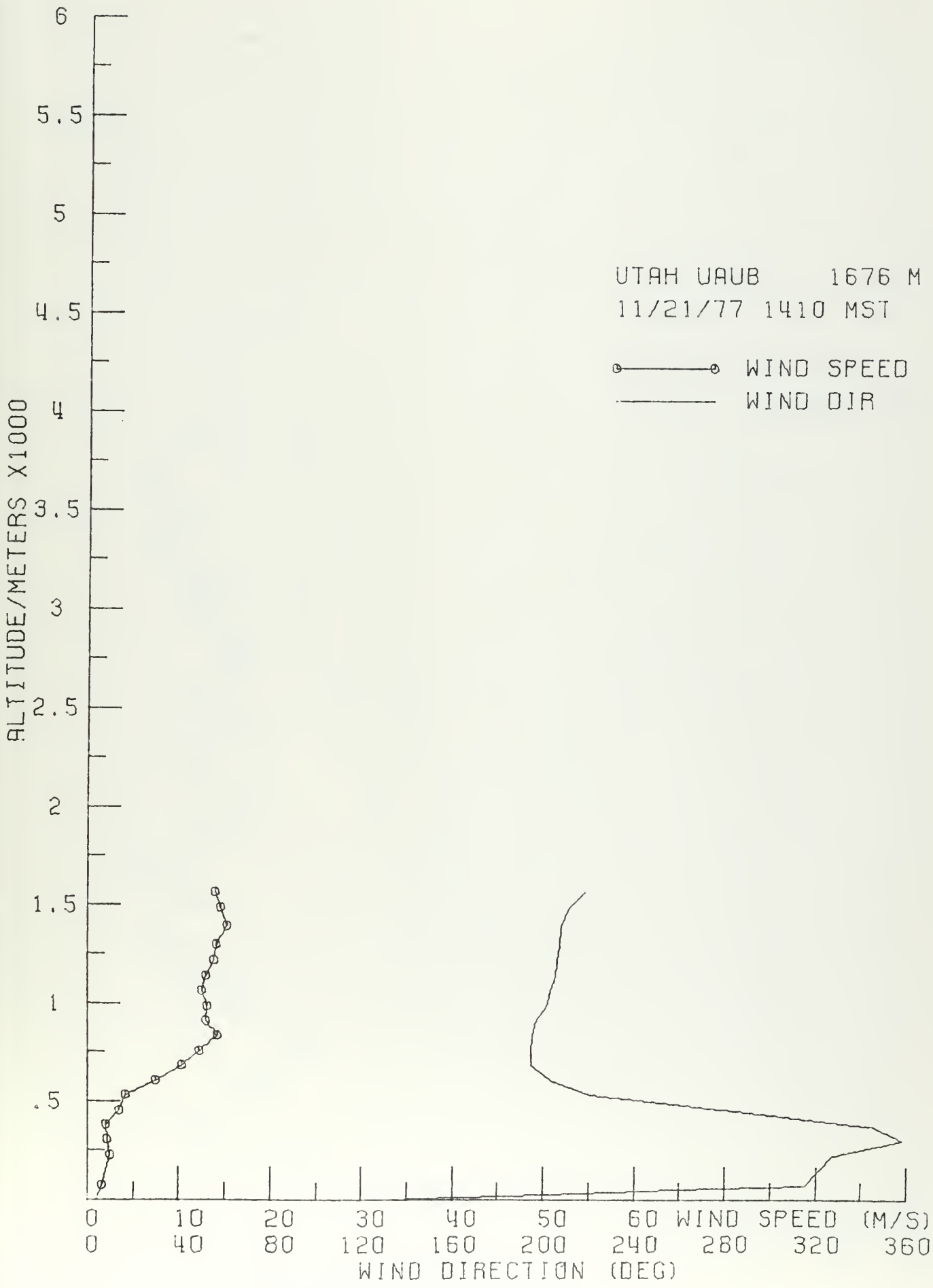
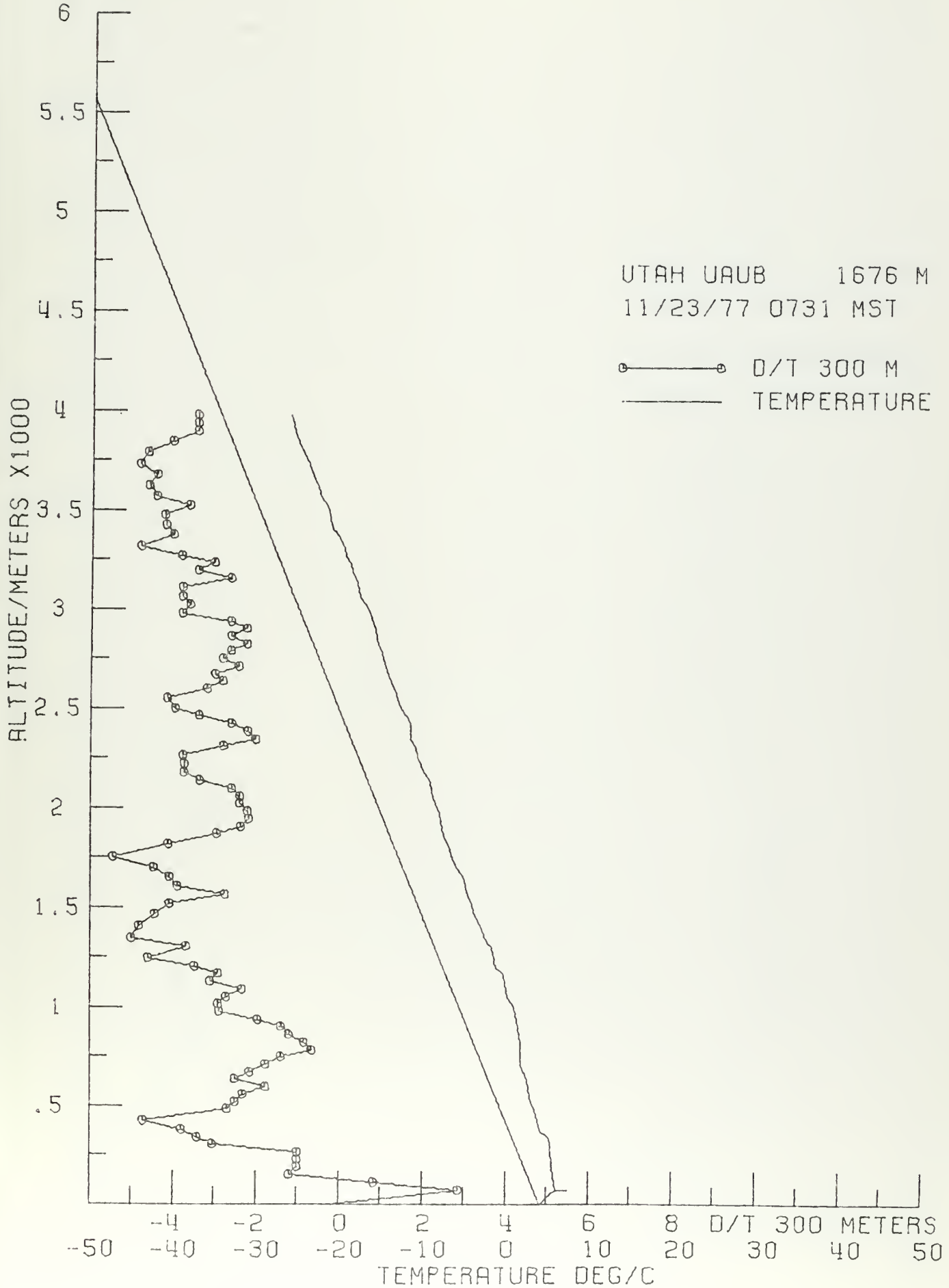
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/21/77 1410 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1676 M
11/23/77 0731 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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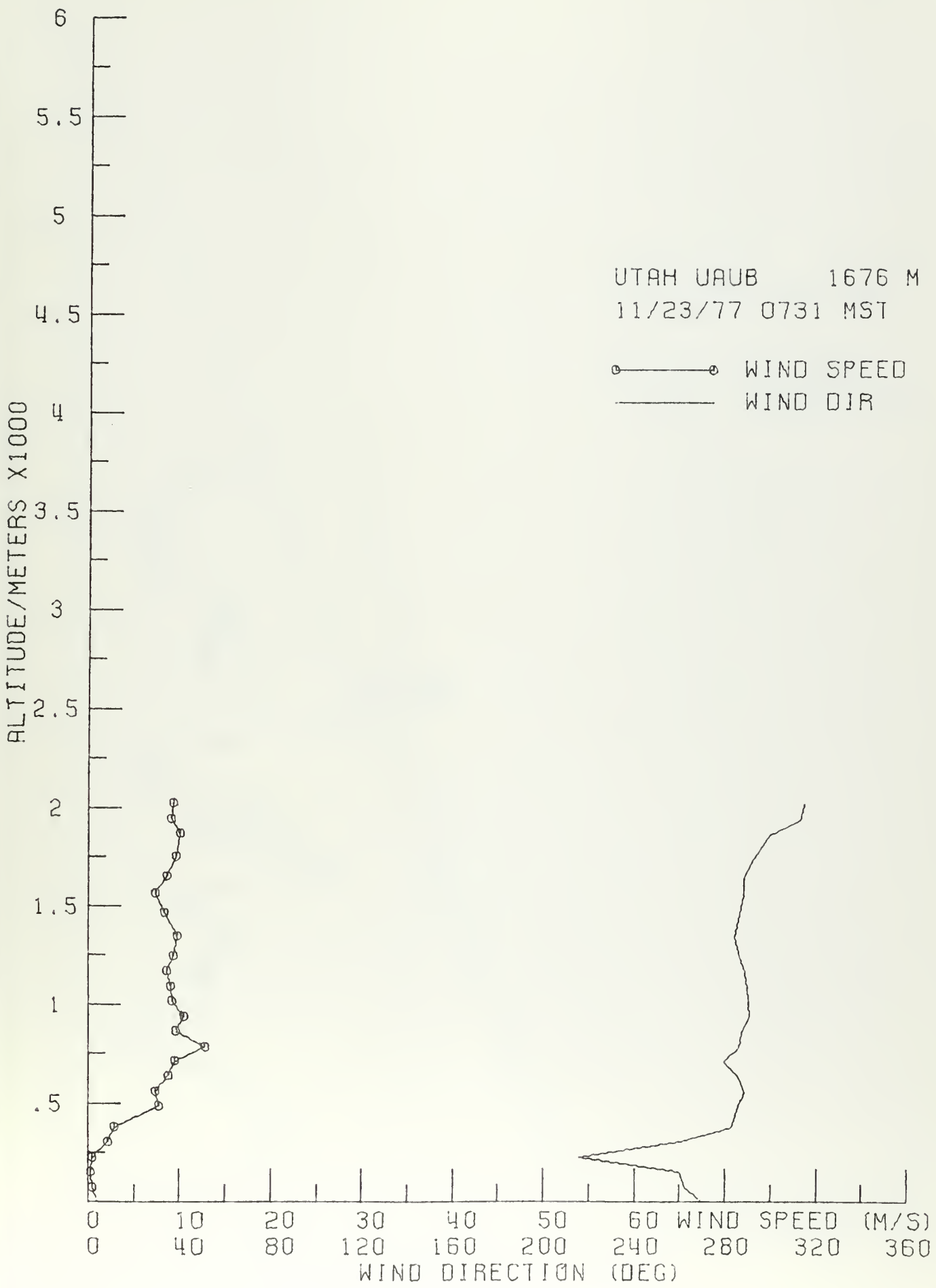
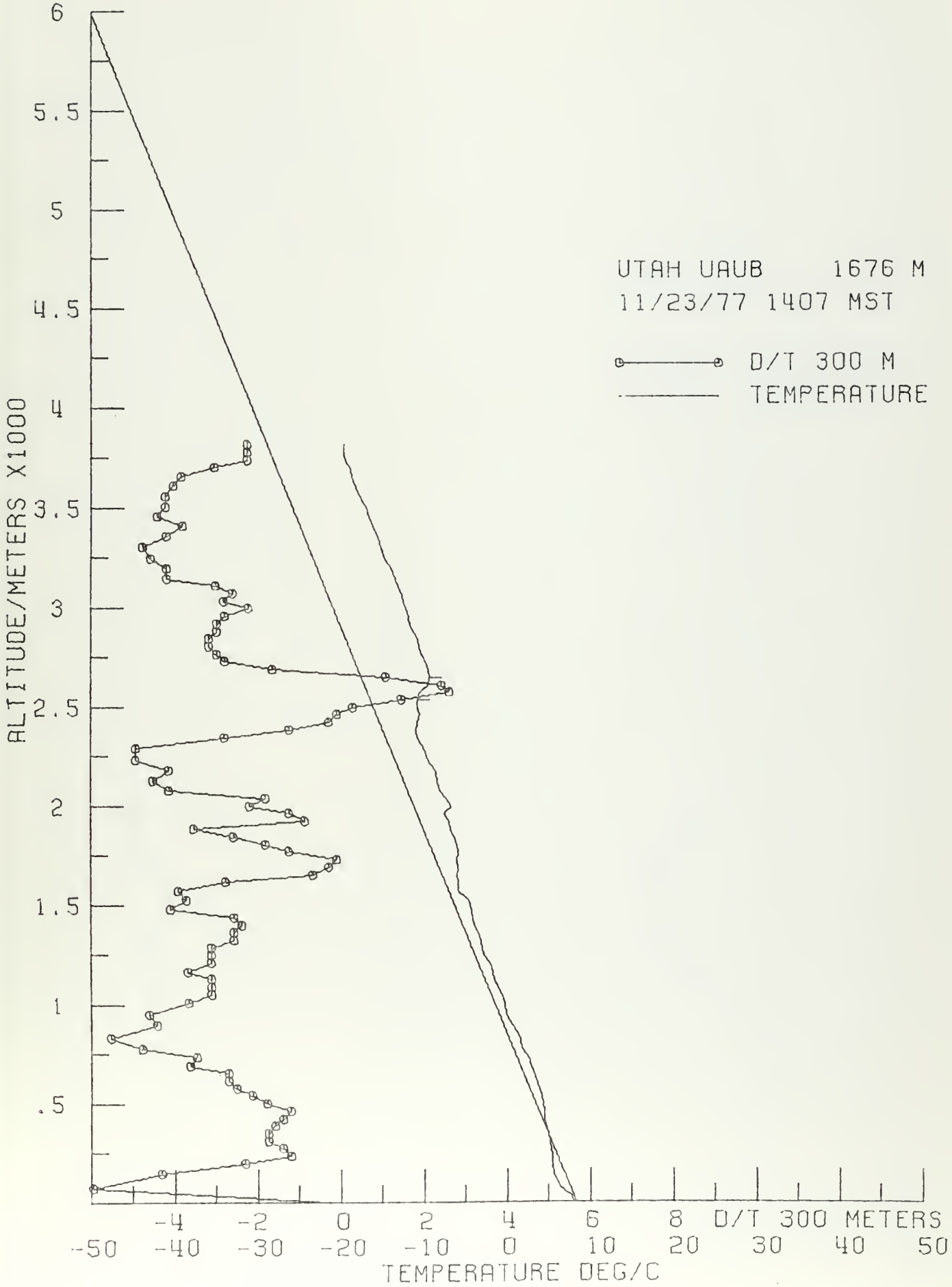
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/23/77 0731 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1676 M
11/23/77 1407 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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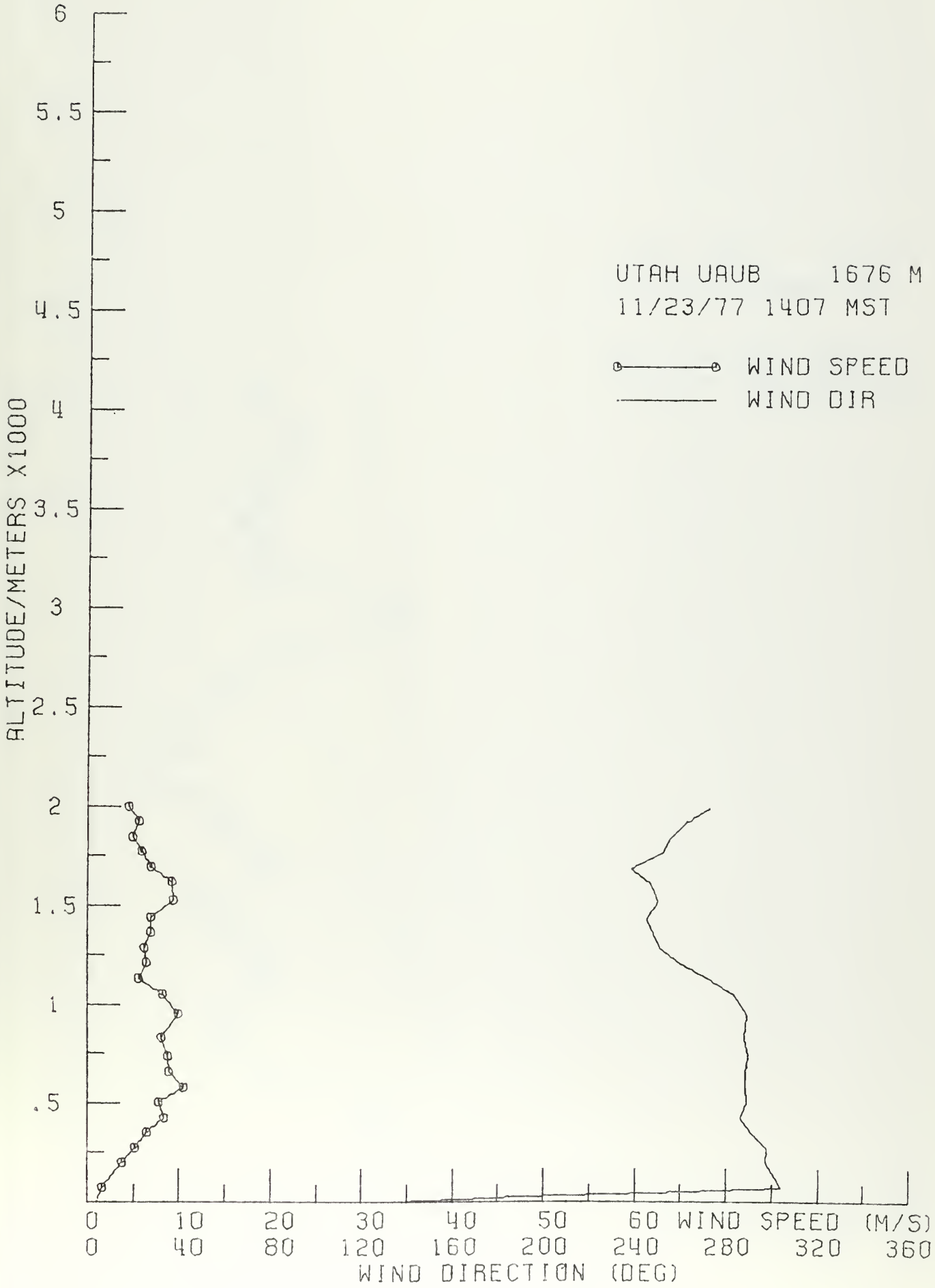
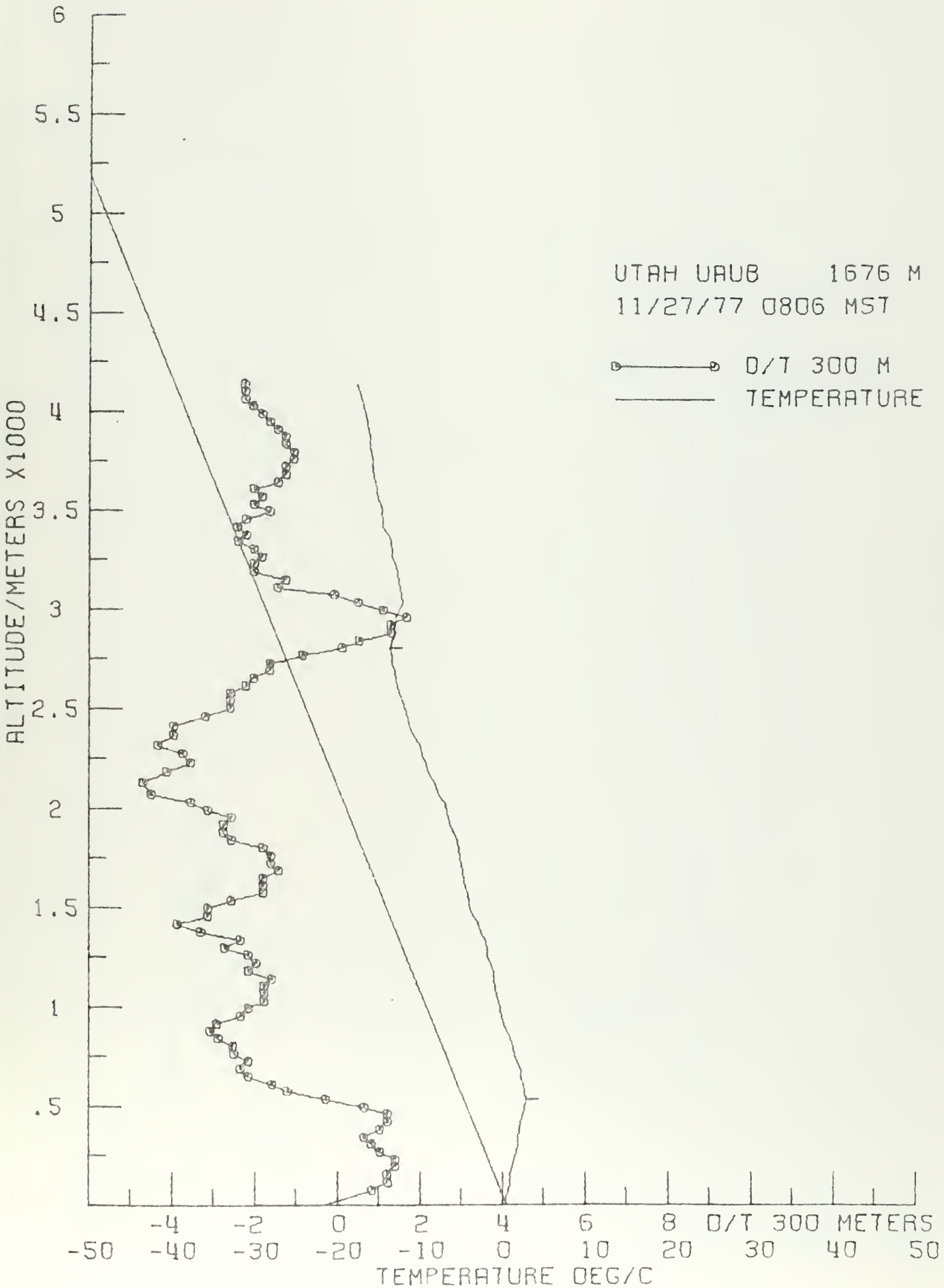
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/23/77 1407 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1676 M
11/27/77 0806 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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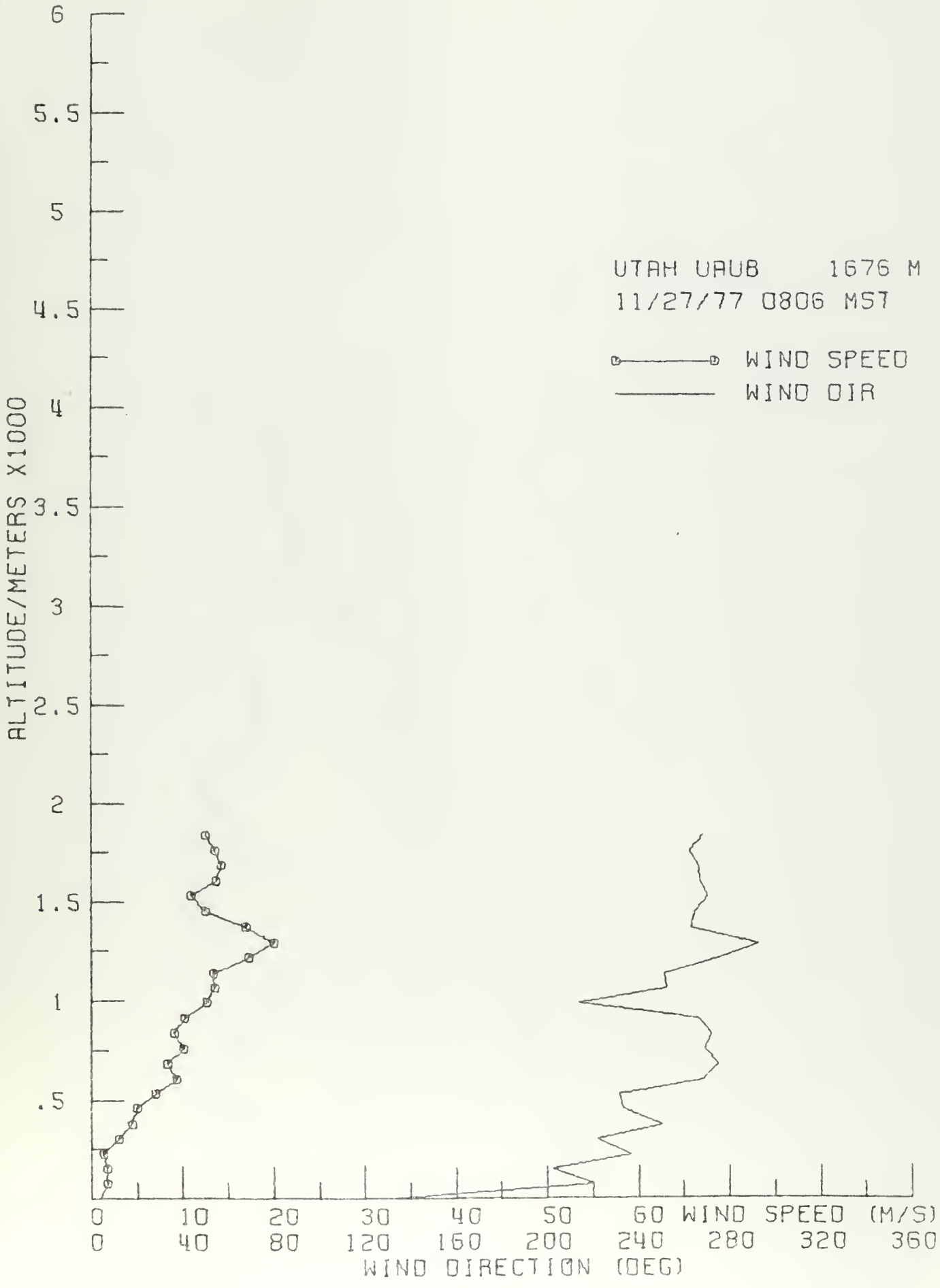
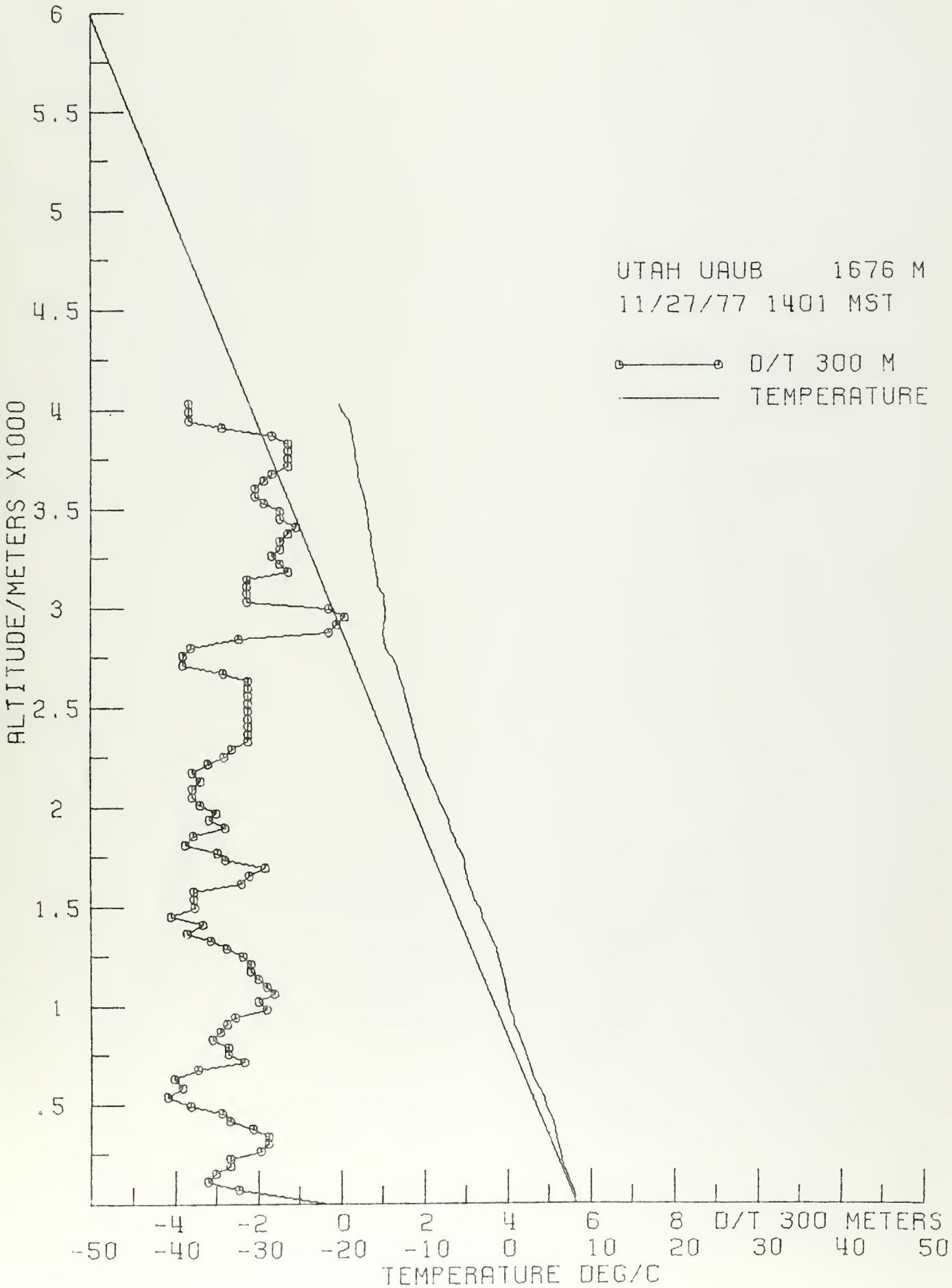
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/27/77 0806 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1676 M
11/27/77 1401 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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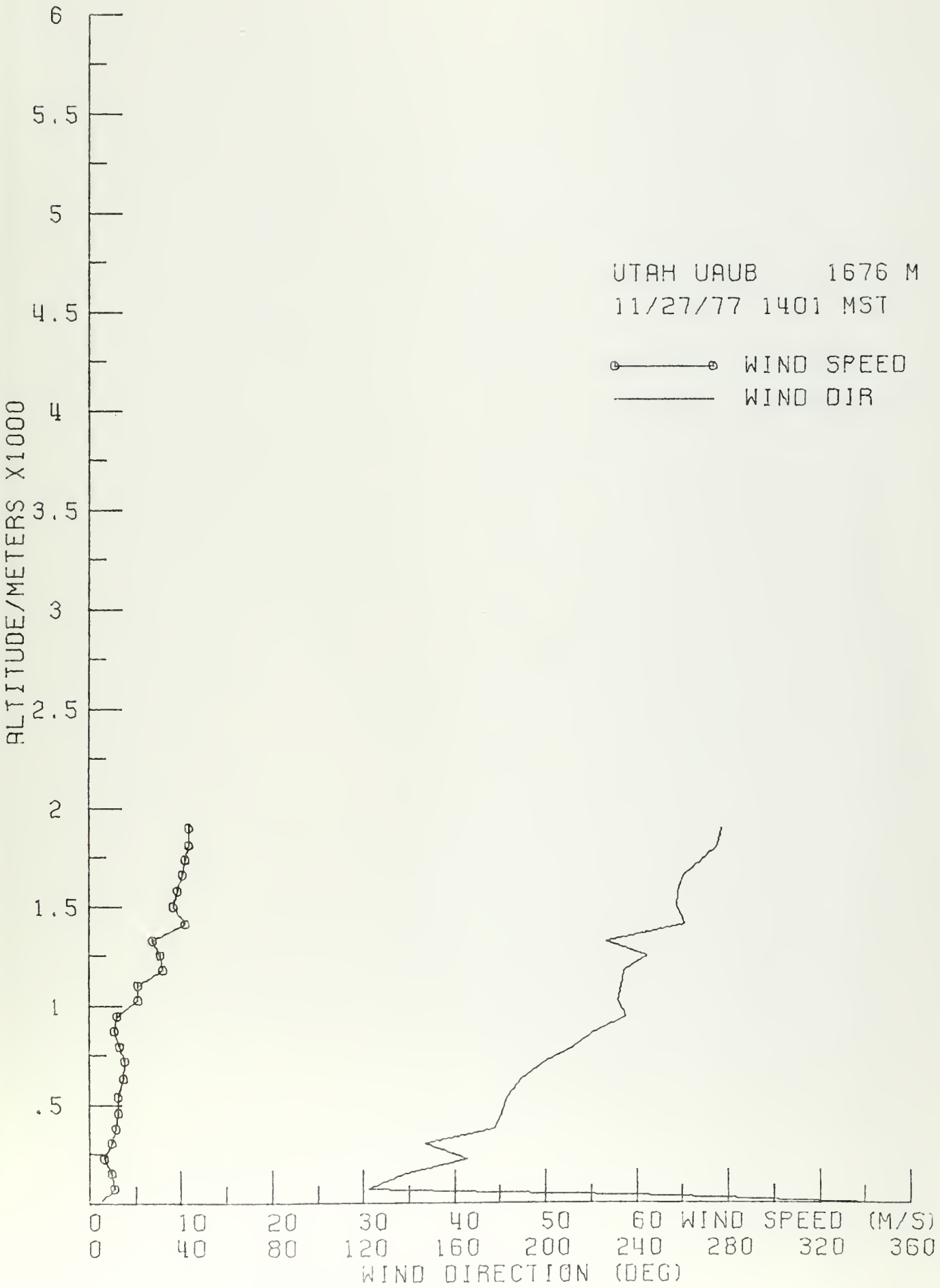
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/27/77 1401 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
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2
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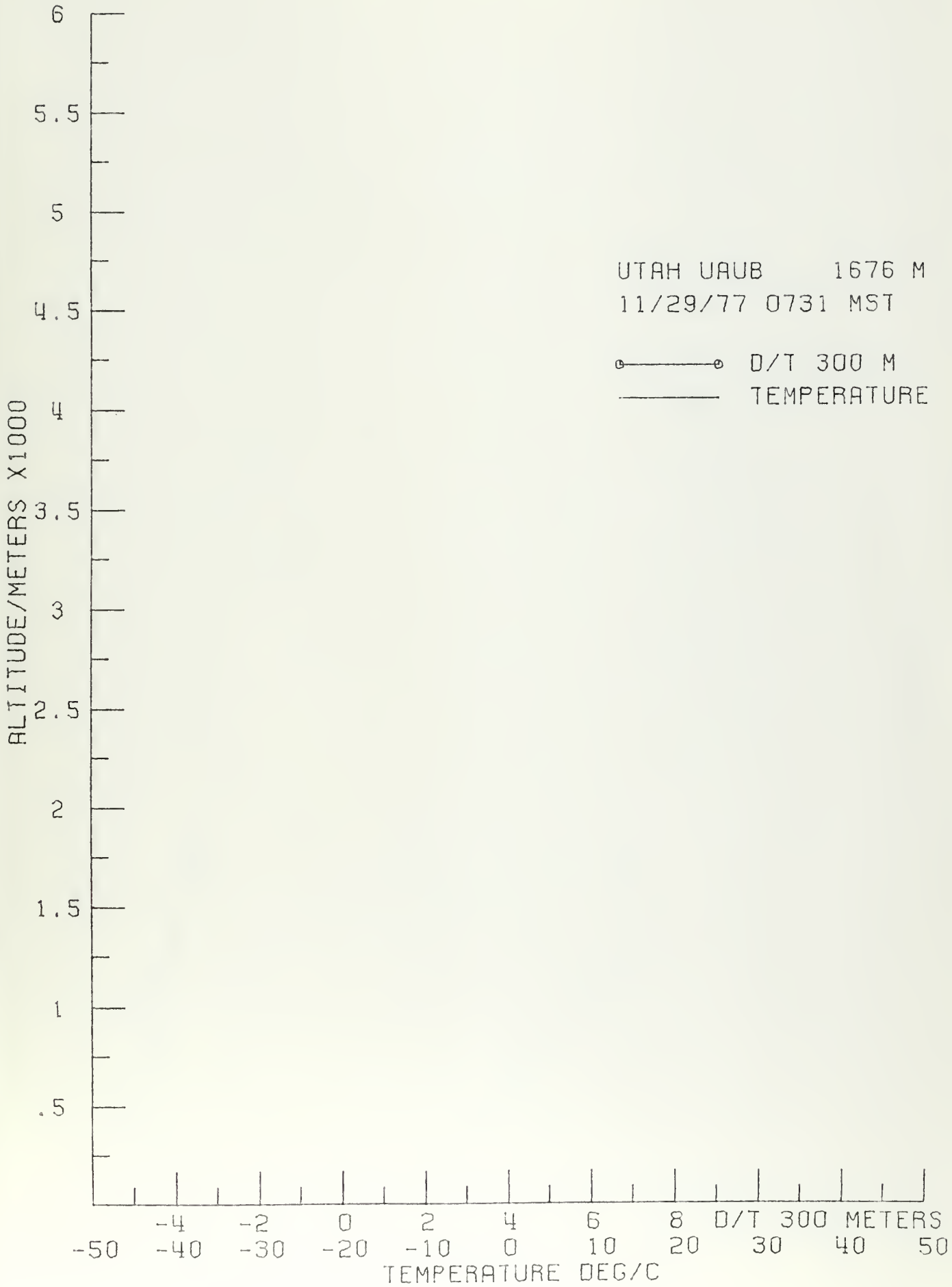
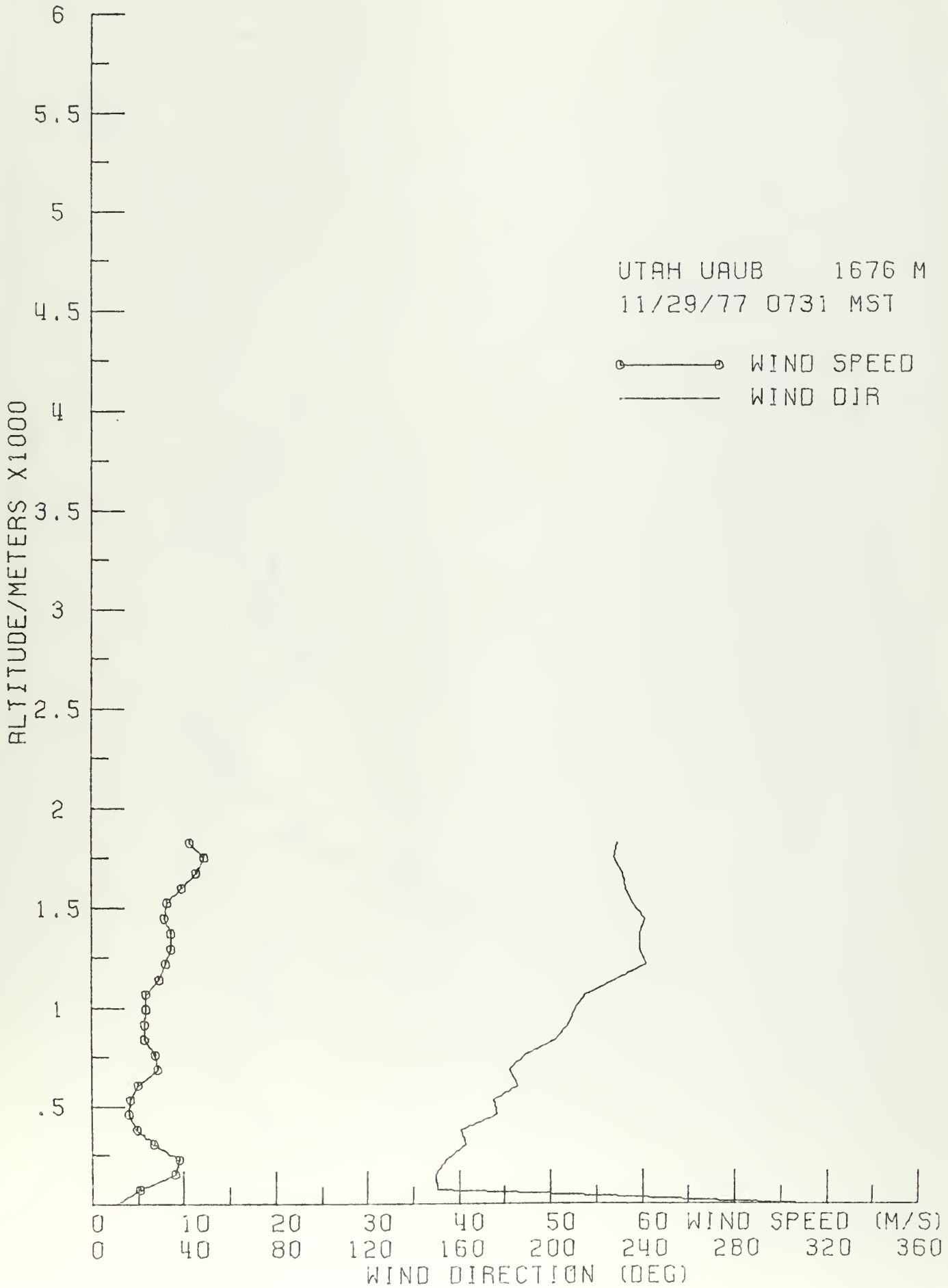
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1676 M
11/29/77 0731 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/29/77 0731 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
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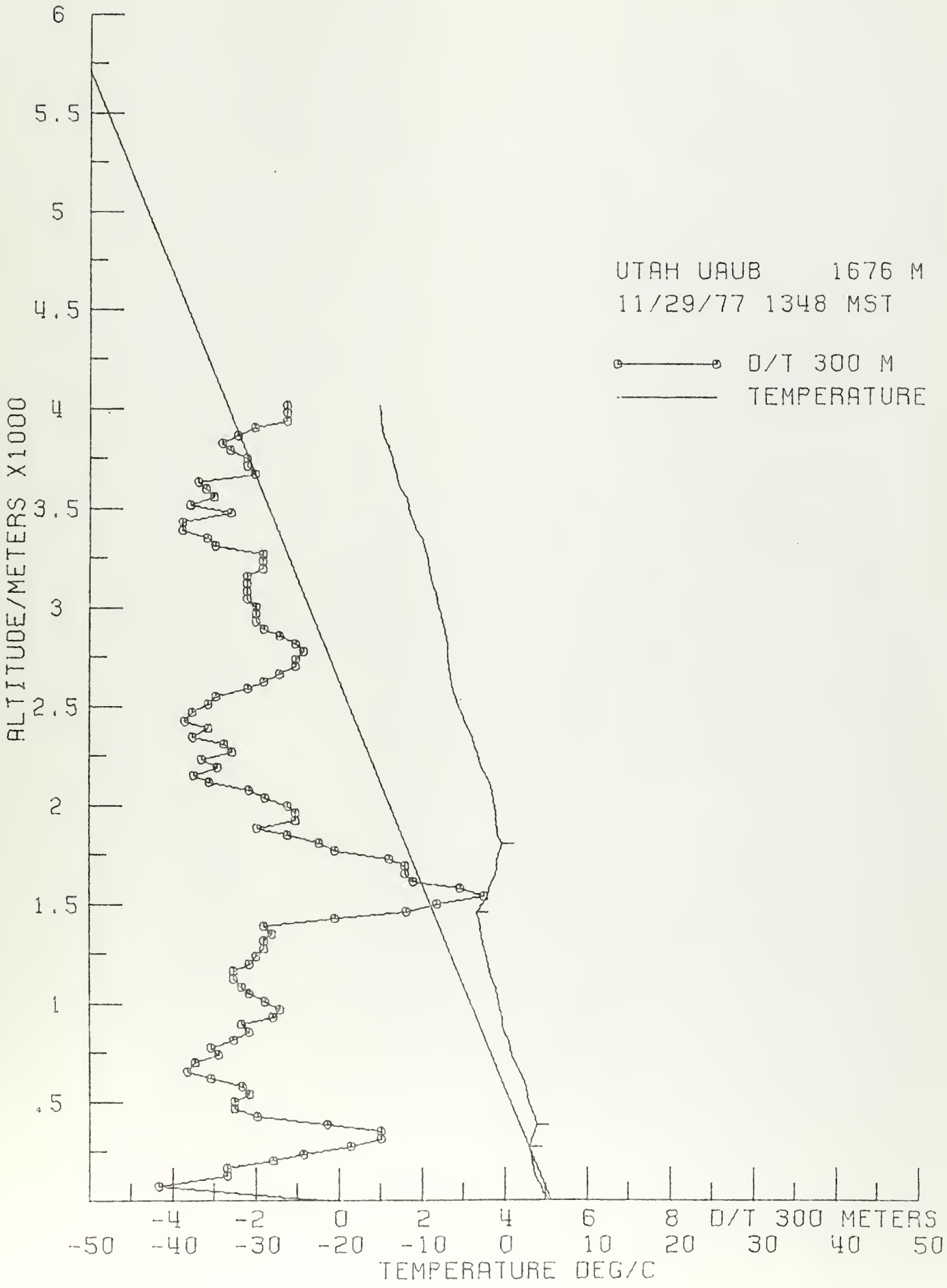
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1676 M
11/29/77 1348 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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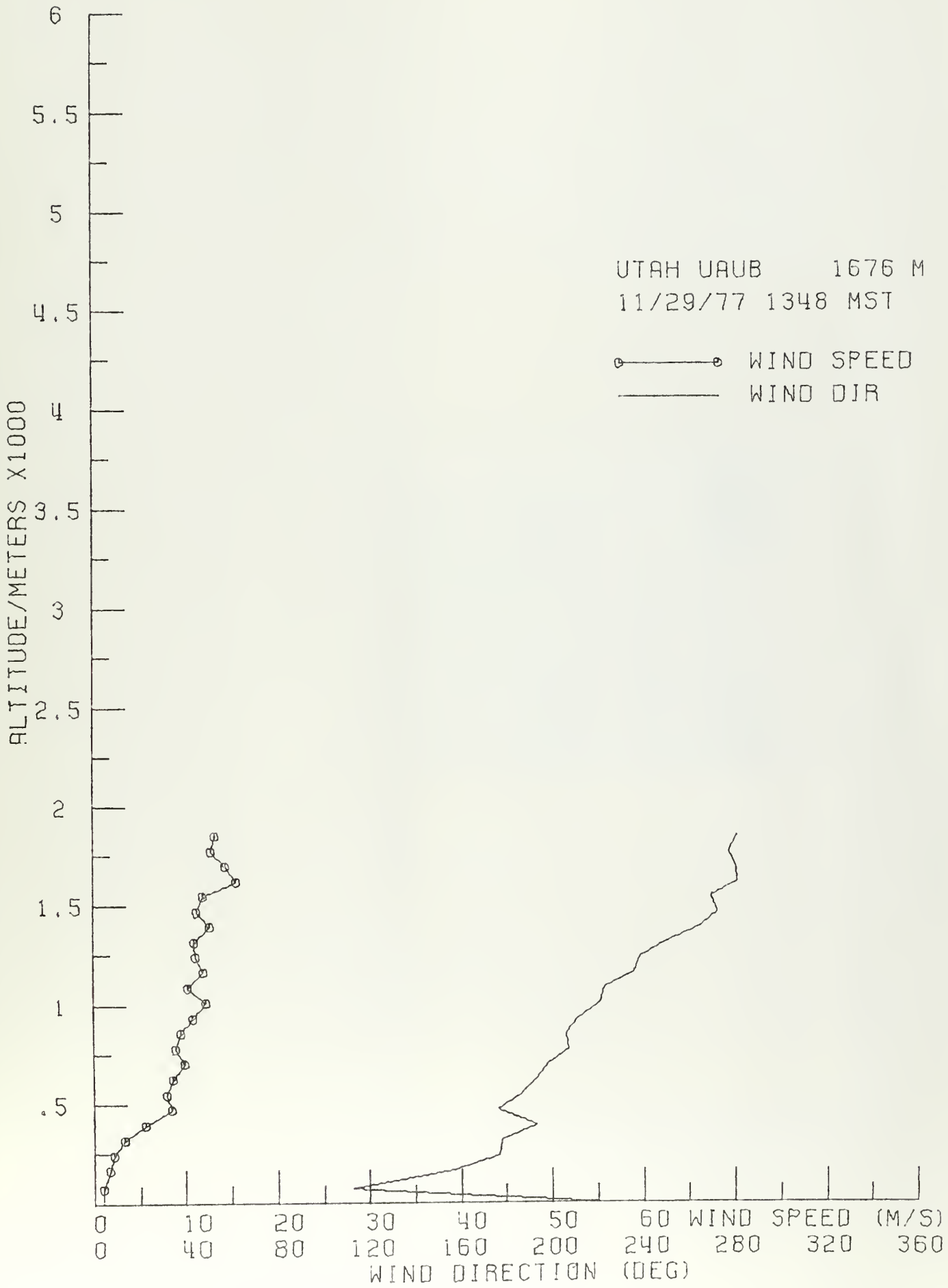
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1676 M
11/29/77 1348 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

Form 1279–3
(June 1984)

BORROWER

TN 867 .U85 W447 1

Monthly progress
for the peri

DATE LOANED	BORROWER

USDI – BLM